

UNIV. OF
TORONTO
LIBRARY.



Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

44C

COLUMBIA UNIVERSITY QUARTERLY

VOL. V—SEPTEMBER, 1903—No. 4

CONTENTS

The Green: View of University Hall. <i>Frontispiece.</i>	
The Question of Educated Youth	GEORGE A. GORDON 381
Commencement Day, 1903	393
The Alumni Luncheon	403
The University Committee on Social Settlements . .	EDWIN R. A. SELIGMAN 424
Shortening the College Course: The Boston Debate . .	FREDERICK P. KEPPEL 429

EDITORIAL COMMENT	440
The Alumni at Commencement—South Field—Hartley Hall—The Carpentier Lecture Fund—A University School of Journalism—Pro- fessor Ware and his Work—William Earl Dodge.	
THE UNIVERSITY	448
The Pulitzer Endowment—Committee on Employment for Students —Summer Session—Changes in the Teaching Staff.	
UNIVERSITY LEGISLATION	454
The Trustees, June Meeting.	
PRIZES, FELLOWSHIPS AND HONORS FOR 1903	456
STUDENT LIFE	458
Class Day at Columbia and at Barnard—Résumé of Student Activities.	
ATHLETICS	462
The Baseball, Track, Lacrosse and Swimming Teams—The Crews and the Poughkeepsie Regatta—Professional vs. Graduate Coaching.	
THE ALUMNI	468
Columbia University Club—Frederic William Holls, '78.	
UNIVERSITY BIBLIOGRAPHY, 1902-1903	471
I. Official Publications—II. The University Press—III. Serial Stud- ies—IV. Journals—V. Student Publications—VI. Publications by Officers.	
UNIVERSITY STATISTICS	R. Tombo, Jr. 496
Summer Session, 1903—University Registration, 1902-1903—Univer- sity Registration, 1898-1903	

Columbia University Quarterly

EDITORS

MUNROE SMITH, *Managing Editor*

RUDOLF TOMBO, JR., *Secretary*

From the College, CLARENCE H. YOUNG

From the Faculty of Law, GEORGE W. KIRCHWEY

From the Faculty of Medicine, FREDERIC S. LEE

From the Faculty of Applied Science, WILLIAM HALLOCK

From the Faculty of Political Science, WILLIAM A. DUNNING

From the Faculty of Philosophy, GEORGE R. CARPENTER

From the Faculty of Pure Science, BASHFORD DEAN

From the Fine Arts, ALFRED D. F. HAMLIN

From Barnard College, MORTIMER L. EARLE

From Teachers College, PAUL MONROE

From the University Press, JOHN B. PINE

From the Library, JAMES H. CANFIELD

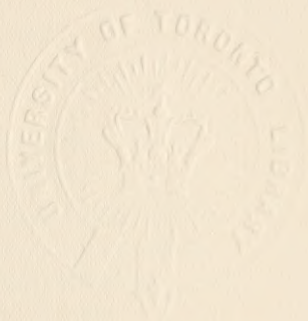
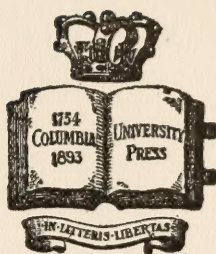
The QUARTERLY is issued by the Columbia University Press, with the approval of the Trustees of the University, and is addressed to the alumni, officers and friends of Columbia.

The magazine aims to represent faithfully all the varied interests of the University. It publishes historical and biographical articles of interest to Columbia men, shows the development of the institution in every direction, records all official action, describes the work of teachers and students in the various departments, reports the more important incidents of undergraduate life, notes the successes of alumni in all fields of activity, and furnishes an opportunity for the presentation and discussion of University problems.

The QUARTERLY is issued in December, March, June and September, each volume beginning with the December number. Annual subscription, **one dollar**; single number, **thirty cents**.

All communications should be addressed to the COLUMBIA UNIVERSITY QUARTERLY, at Lancaster, Pa., or at Columbia University, New York City. Subscriptions may also be entered and single numbers purchased on the University grounds, at the University Press Bookstore, West Hall.

Columbia University Quarterly



63582
11/11/04

❖❖❖❖❖❖ PUBLISHED BY THE
COLUMBIA UNIVERSITY PRESS
VOLUME V: 1902-1903 ❖❖❖❖❖



PRESS OF
THE NEW EDA PRINTING COMPANY,
LANCASTER, PA.

EDITORS

MUNROE SMITH, *Managing Editor*

RUDOLF TOMBO, JR., *Secretary*

From the College, CLARENCE H. YOUNG

From the Faculty of Law, GEORGE W. KIRCHWEY

From the Faculty of Medicine, FREDERIC S. LEE

From the Faculty of Applied Science, WILLIAM HALLOCK

From the Faculty of Political Science, WILLIAM A. DUNNING

From the Faculty of Philosophy, GEORGE R. CARPENTER

From the Faculty of Pure Science, BASHFORD DEAN

From the Fine Arts, ALFRED D. F. HAMLIN

From Barnard College, MORTIMER L. EARLE

From Teachers College, PAUL MONROE

From the University Press, JOHN B. PINE

From the Library, JAMES H. CANFIELD

COLUMBIA UNIVERSITY QUARTERLY

CONTENTS

VOLUME V

1902-1903

I *Subjects*

- Administrative Problems, *Ed.*, 64.
Alliance Française, 207, 239.
Alumni, The, 126, 248, 377, 468.
 Association of California, 380;
 Colorado, 380; District of
 Columbia, 127, 378.
 At Commencement, *Ed.*, 440.
 Class of 1878, 377; 1888, 377;
 1898, 378; 1899, 127, 379;
 1900, 128; 1901, 129; 1902,
 130.
 Dinner (1902), 126.
 Luncheon (1903), 403.
 Necrology, 209, 248, 469.
 Sloane Maternity Hospital, 127,
 380.
Americanists, Congress of, 69.
Anarchica, Purchase of, 328, *Ed.*,
 315.
Anatomy, Dept. of, 338.
Anniversary, 150th, of King's Col-
 lege, 320, 363, 367.
Applied Science, Faculty of, 91, 212,
 348, 369.
Archæology, Loubat Professorship
 of American, 206.
Architecture, School of, 118, 217,
 356.
 Twenty-first Anniversary, 71.
Association of American Universi-
 ties, 201.
Astronomy, Dept. of, 100, 225, 338.
Athletic Control, The Problem of,
 G. W. Kirchwey, 15.
Athletics, 126, 247, 373, 462.
 Baseball, 248, 375, 462; Bas-
 ketball, 247; Fencing, 248,
 376; Football, 126; Golf, 126,
 375; Gymnasium, 81, 197, 247,
 376; Hockey, 247; Lacrosse,
 247, 376, 465; Rowing, 126,
 248, 375, 466; Swimming,
 126, 247, 376, 465; Tennis,
 126, 375; Track, 247, 376, 464.
 Control of, *Ed.*, 316; also 15,
 373.
 University Committee on, 373.
Baccalaureate Sermon (1903), *G.*
 A. Gordon, 381.
Barnard College, 80, 116, 231, 325,
 357, 459.
Beer, Julius, Political Science Lec-
 ture Fund, 207, 369.
Bibliography, 1902-3, 471.
Botany, Dept. of, *L. M. Underwood*,
 278; also 100, 225, 339; at Bar-
 nard, 231.
Budget for 1903-4, 322.
Butler, Mrs. Nicholas Murray, Fu-
 neral of, 210; In Memoriam, *Ed.*,
 200.
Calendar, Academic, 208, 367; *Ed.*,
 197.
Carnegie Institution, Research As-
 sistants of, *Ed.*, 195.
Carpentier, Lecture Fund, The, 420,
 Ed., 443, 454.
Castner Memorial Tablet, 212.
Cauldwell, John B., Speech at Alumni
 Luncheon, 405.
Chapel Services, 74.
Chemical Society, The, 95, 344.
Chemistry, Dept. of, 91, 341; at
 Barnard, 116.
Churchmen's Association, 79.

- Class Day (1903), at Columbia, 458; at Barnard, 459.
 Classical Philology, Dept. of, 83; at Barnard, 116, 357.
 Division of, 330.
 College, The, 82.
 College Course, Relation to Professional Schools, *Ed.*, 312.
 Shortening the: Faculty Opinions, *Munroe Smith*, 133; The Chicago Conference, *Munroe Smith*, 307; The Boston Debate, *F. P. Keppel*, 429; *Ed.*, 196.
 Columbia College Thirty-five Years Ago, *Brander Matthews*, 260.
 Columbia University Club, 468.
 Commencement Day (1903), 393.
 Comparative Literature, Dept. of, 83, 222, 331.
 Convocation Week, *Ed.*, 194.
 Cornell Students at Columbia, 319.
 Council, The University, 240, 367.
 Dean, Position of the, *Ed.*, 64.
 Degrees, Honorary (1903), 205, 393.
 Diseases of Children, Dept. of, 84, 351.
 Divisional System, The *Ed.*, 314.
 Dodge, William Earl, *Ed.*, 448.
 Dramatics at Columbia, History of *A. M. Lederer*, 174, 268.
 Earl Hall, Student Activities in, 211; *Ed.*, 448.
 Economics and Sociology, Dept. of, 337; see also Political Science.
 Electrical Engineering, Dept. of, 212, 348.
 Employment for Students, Report of Committee, 450.
 Endowments and Gifts, 122, 123, 206, 220, 239, 363, 364, 365, 420, 448, 454; *Eds.*, 442, 443, 445.
 English, Dept. of, 99, 331; at Barnard, 357.
 Extension Work, 359, 367.
 Fellowships, International, 71, 367.
 Fellowships (1903-4), 368, 457.
 Finances of the University, *Ed.*, 62.
 Fine Arts, The, 74, 118, 216, 356.
 France, Opportunities for University Study in, *Adolphe Cohn*, 296.
 Genito-Urinary and Venereal Diseases, Dept. of, 221.
 Geology, Dept. of, 102, 226, 344.
 Germanic Languages, Dept. of, 222, 331.
 Gottheil Lectureship in Semitic Languages, 207.
 Graduate Students at Columbia (1902-3), 121.
 Gymnasium, The, 81.
 Guide, *Ed.*, 197.
 Gynæcology, Dept. of, 351.
 Hartley Hall, 420, *Ed.*, 442.
 Hewitt, Abram S., *H. T. Peck*, 191; Alumni Minute, 209.
 Historical Association of the Middle States, 359.
 History, Dept. of, 335; at Barnard, 357; see also Political Science.
 Holls, E. F. W., 469.
 Humphreys, President A. C., Speech at Alumni Luncheon, 407.
 Humphreys, Willard, *C. H. Young*, 45.
 Indo-Iranian Languages, Dept. of, 333.
 Journalism, University School of, 448, *Ed.*, 445.
 Jusserand, Ambassador, Speech at Alumni Luncheon, 413.
 Laryngology, Dept. of, 85.
 Latin, Dept. of, 331.
 Law Alumni Association, *Ed.*, 200.
 Law School, 218, 353.
 Legislation, Summaries of University, 122, 238, 363, 454.
 Library, The, 119, 327.
 Loubat Professorship of American Archæology, 206.
 Materia Medica and Therapeutics, Dept. of, 351.
 Mathematical Society, American, 204.
 Mathematics, Dept. of, 227, 345; at Barnard, 231.
 Mechanical Engineering, Dept. of, 214, 349.
 Medicine, School of, 84, 219, 351, 422; *Ed.*, 199.
 Metallurgy, Dept. of, 97, 215, 350.
 Mineralogy, Dept. of, 104, 346.
 Mines, School of, 95.
 Moore, Nathaniel F., LL.D., *Anon.*, 182.
 Necrology, see Alumni.
 Neurology, Dept. of, 221.
 Notable University Happenings, *Ed.*, 66.
 Odell, Governor, Speech at Alumni Luncheon, 415.

- Ophthalmology. Dept. of, 352.
 Oriental Languages at Columbia University, *R. J. H. Gottheil*, 24.
- Pathology, Dept. of, 88.
 Personnel of Teaching Staff, Changes in, 68, 122, 123, 238, 239, 240, 321, 363, 365, 366, 422, 453, 455; *Ed.*, 66.
 Phillips Brooks Guild of Teachers College, 79, 326.
 Philolexian Society at Columbia, History of, *E. A. Cardozo*, 30.
 Philosophy, Faculty of, 99, 222, 330.
 Philosophy and Psychology, Dept. of, 334; at Barnard, 232.
 Phoenix Physical Laboratories, The, *Wm. Hallock*, 293.
 Physics, Dept. of, 105, 228, 346; at Barnard, 232.
 Physiological Chemistry, Dept. of, 89.
 Physiology, Dept. of, 90, 352.
 Political Science, Academy of, 70. Faculty of, 99, 221, 242, 335, 369.
 Poughkeepsie Regatta, 466, 468.
 Practice of Medicine, Dept. of, 91.
 President's Report, The, *A. D. F. Hamlin*, 1; also *Ed.*, 62; Opening Address (1902), 67; Speech at Alumni Luncheon, 417; Addresses N. E. A. Meetings (Minneapolis, 1902, and Boston, 1903), 37, 434.
 Press, University, Publications of the, 212, 472.
 Price, Thomas Randolph, *W. P. Trent*, 302; Faculty Minute, 304; *Ed.*, 319; Minute of English Graduate Club, 372; Trustees' Minute, 454.
 Pritchett, President, on Theology in the University, *Anon.*, 163.
 Prizes, Fellowships and Honors (1903), 456.
 Proudfit Fellowship in Medicine, 220.
 Public Law and Comparative Jurisprudence, 337. See also Political Science.
 Publications of the University, 471.
 Pulitzer Endowment of School of Journalism, 448; *Ed.*, 445.
 Pure Science, Faculty of, 100, 225, 338.
 Question of Educated Youth, The, Baccalaureate Sermon (1903), *G. A. Gordon*, 381.
- Reception to Newly Appointed Professors, 68.
 Registration at Columbia, 131, 496; at leading American Universities, 252.
 Religious Interests, 74, 210, 323.
 Romance Languages, Dept. of, 83, 224, 333; at Barnard, 117, 358.
 Rood, Ogden N., *J. H. Van Amringe*, 47; Address by *M. R. Vincent*, 57; Faculty Minute, 82.
- Schermerhorn, William C., *J. B. Pine*, 189; Alumni Minute, 209; Trustees' Minute, 238.
 Secondary Education, Dept. of, 235.
 Social Settlements and Allied Work, University Committee on, *E. R. A. Seligman*, 424.
 South Field, Its Possible Uses, *J. B. Pine*, 253; The Artistic Problem, *A. D. F. Hamlin*, 257; Acquisition of, 418; *Ed.*, 441.
 Speyer School of Teachers College, The, *J. D. Burks*, 166; also 358.
 Statistics, 121, 131, 252, 451, 496.
 Student Life, 124, 243, 370, 458; Chemical Society, 95, 344, 462; Chess, 125, 245, 461; Class Activities, 125, 245, 372, 458; Class-Days, 458, 459; Debating, 125, 244, 370, 461; Deutscher Verein, 124, 243, 332, 372, 462; Earl Hall, 211, 372; Engineering Society, 462; English Graduate Club, 372; Glee and Mandolin Club, 461; Graduate Club, 245; History Club, 336; King's Crown, 124, 243, 371, 460; Literary Club, 371, 462; Publications, 124, 244, 372, 460, 478; Société Française, 124, 244, 371, 461; Sophomore Show, 461; Varsity Shows, 124, 243, 461; Whist Team, 245; Whittier Hall, 232; Women's Graduate Club, 245. See also Athletics and Religious Interests.
 Summer Courses in Medicine, 220.
 Summer Session, 236, 451.
 Surgery, Dept. of, 353.
- Teachers College, 110, 232, 242, 358, 370.
 Ten Million Dollars Needed, *Ed.*, 62.

- Thompson, J. J., Speech at Alumni Luncheon, 411.
 Trustees, Proceedings of, 122, 238, 363, 454.
- Van Amringe, J. H., Speech at Alumni Luncheon, 403.
- Ware, Professor William R., and His Work, *Ed.*, 447; Trustees' Minute, 455; see also Architecture, School of, 21st Anniversary, 71.
 Whittier Hall, 232.
- Y. M. C. A., 76, 210, 323.
 Y. W. C. A., 80, 325.
- Zoölogy, Dept. of, 107, 229, 347; at Barnard, 117.

II Writers

- Burks, J. D., *The Speyer School of Teachers College*, 166.
- Butler, N. M., *Some Pressing Problems*, 37.
- Cardozo, E. A., *The Philolexian Society at Columbia University: I. Founding of the Society*, 30.
- Cohn, Adolphe, *Opportunities for University Study in France*, 296.
- Gordon, G. A., *The Question of Educated Youth* (Baccalaureate Sermon, 1903), 381.
- Gottheil, R. J. H., *The Oriental Languages at Columbia University*, 24.
- Hallock, William, *The Phœnix Physical Laboratories*, 293.
- Hamlin, A. D. F., *South Field: The Artistic Problem*, 257; *The President's Report* (1902), 1.
- Keppel, F. P., *Shortening of the College Course: The Boston Debate*, 429.
- Kirchwey, G. W., *The Problem of Athletic Control*, 15.
- Lederer, A. M., *A History of Columbia Dramatics: II*, 174; *III*, 268.
- Matthews, Brander, *Columbia College Thirty-five Years Ago*, 260.
- Peck, H. T., *Abram S. Hewitt*, 191.
- Pine, J. B., *William C. Schermerhorn*, 189; *South Field: Its Possible Uses*, 253.
- Seligman, E. R. A., *The University Committee on Social Settlements and Allied Work*, 424.
- Smith, Munroe, *Shortening the College Course: Faculty Opinions*, 133; *The Chicago Conference*, 307.
- Trent, W. P., *Thomas Randolph Price*, 302.
- Underwood, L. M., *The Department of Botany*, 278.
- Van Amringe, J. H., *Ogden N. Rood*, 47.
- Young, C. H., *Willard Humphreys*, 45.

III Illustrations

- Ogden N. Rood, 1.
 Willard Humphreys, 45.
 Installation of President Butler, 133.
 Speyer School, 167.
 Nathaniel F. Moore, 183.
 Plan of College Grounds, 185.
 Park Place in 1842, 187.
 William C. Schermerhorn, 189.
 Abram S. Hewitt, 191.
- Castner Memorial Tablet, 213.
 Thomas Randolph Price, 253.
 South Field: Plan A, 257.
 South Field: Plan B, 259.
 Hosack Botanical Garden (1801), 279.
 Botanical Museum, Bronx Park (1893), 283.
 The Green: View of University Hall, 381.



OGDEN N. ROOD
PROFESSOR OF PHYSICS, 1864-1902

COLUMBIA

UNIVERSITY QUARTERLY

VOL. V—DECEMBER, 1902—No. 1

THE PRESIDENT'S REPORT

WHEN the Trustees of Columbia University selected an educational expert to succeed Dr. Low as president, it was with full and far-sighted recognition of the fact that the most difficult problems which confront them are problems of educational policy rather than of finance, great as are the financial needs of the university. In the process of evolution and development through which Columbia has passed and is still passing, under conditions unique in university annals, there have arisen problems unlike those which past experience has solved; problems for whose solution there is needed the keen vision, the clear analysis, the wise measuring of relative values, of the trained expert in education. There is needed furthermore somewhat of the spirit of the seer, and therewith the courage to break new paths, to open new vistas, to grapple with custom and tradition when they bar the path of progress. Dr. Butler's Report to the Trustees for the year 1901-1902 is an educational document of exceptional importance, not merely because it is the work of one of the most eminent of living specialists in education, but also and chiefly because it gives evidence of that prescience and of that courage which the educational problems of the day demand for their solution. The interest it has aroused, the wide discussion and comment

to which it has given rise, are tokens of its freshness and vigor. It is no perfunctory document complacently reviewing the year's achievement, but a clear, forceful, concise setting forth of the exact situation and of all the difficulties inherent in the situation, in which the university now finds itself, with an equally clear presentation of the methods and measures by which, in the President's opinion, these difficulties should be met. There has been so much misdirected comment upon the Report, due to misconception of its real contentions, that it is fitting that the opening pages of this issue of the *QUARTERLY* should be devoted to a presentation of the substance and in part of the exact text of those parts which have most aroused the public interest.

The Report proper, which forms a document of seventy printed pages, opens with a reference to the retirement of President Low, and proceeds to a brief statistical conspectus of the state of the university in 1901. It then attacks the subject of "Present Problems," and devotes forty-seven pages to their discussion. The remaining twenty pages are chiefly occupied with the detailed presentation of the work of the university and of the changes, reorganizations, appointments and deaths which have occurred during the academic year, closing with a brief but masterly setting forth of the relations of this university to the metropolis.

The present problems are discussed under three heads: the financial, the administrative, and the educational. Each of these in turn is presented with absolute frankness, its difficulties clearly and forcibly stated, and the solution propounded and explained with equal clearness. Dr. Butler wastes no words on preliminary approaches, but cuts directly to the core of the matter, with the skill and courage of the expert surgeon whose experienced hand knows no tremor. His analysis of the situation which has given rise to the problem is masterly, and when he has developed the factors of the problem he proceeds without hesitation to the solution which the inexorable logic of the situation seems to him to demand. Prece-

dents, traditions, popular misconceptions and serious objections are dealt with in a manner at once positive and courteous, and every new and advanced position is fortified with an array of positive facts and official statistics. The Report abounds in matters for controversy and has already set many minds to thinking seriously along new lines; and the discussion which has begun, and is bound to continue until the questions under discussion have been settled, cannot fail to exert a stimulating and lasting influence on the development of the higher education in America in years to come.

As those portions of the Report which deal with the financial and administrative problems are made the subjects of editorial comment on another page, this paper will be devoted entirely to Dr. Butler's discussion of the educational problem. This is considered under the five heads of (1) the maintenance of educational efficiency; (2) the promotion of research; (3) the better organization of the teaching of the natural sciences; (4) the development of the social side of academic life by the provision of dormitories; (5) the length of the college course and the relation of that course to the rest of the work of the university.

"To secure and maintain educational efficiency," says Dr. Butler, "is the most serious and ever-present aim of every institution of learning. Educational efficiency rarely happens; it is made by careful plan and unremitting supervision. It is unattainable when poor teaching is permitted . . . and when standards are lowered for personal, social or athletic reasons or to secure a larger attendance of students. . . . Columbia University . . . consciously makes no concessions whatever to the desire for numbers." The report continues:

We are more concerned about the quality of the work done than about a rapid increase in the number of students, and we wish to do thoroughly well that which has been already begun before branching out into new undertakings that further tax our resources and divide our energies.

I find myself in hearty agreement with the recently ex-

pressed opinion of President Jordan of Stanford University that "in the long run, the greatest university will be the one that devotes the most care to its undergraduates," and for that reason I believe that too much care and attention cannot be given to the students in Columbia College. The student who comes to Columbia College must be thoroughly well taught from the very beginning of the Freshman year; and the reading of lectures or the hearing of prepared recitations is not teaching.

This pronounced declaration that Columbia is not striving for numbers, a declaration which undoubtedly reflects the feelings both of the trustees and the faculties, is followed by a caution against the danger of exalting "devices and methods" in teaching, since these change with startling rapidity, while the inculcation of fundamental principles arms the student with resources available under all changes of method and circumstance. Turning then to the second topic, the Report continues:

The best teacher is a constant student, and the constant student sooner or later tends to become an investigator. The terms investigation and original research have been so parodied and abused of late that their real significance is not understood and valued as it should be. Yet these terms stand for the idea which differentiates the university from the college. We shall not reach an ideal condition until every department in the university, without exception, regards itself as charged with the duty of investigating as well as with that of teaching. Among its advanced students there should always be a group of those who are being trained in the methods by which real investigation is alone possible; the spirit of investigation and the pursuit of new truth should pervade every university department from top to bottom.

Under the third head, the instruction in the natural sciences given in the university is criticized as lacking in systematic organization, although admirably equipped on the material side. It is pointed out that this instruction has chiefly grown

up outside of the College, mainly in the science faculty formerly known as the School of Mines, and "filtered back into the College" with the development of the elective system. It was not until 1892 that the Faculty of Pure Science was established. Dr. Butler says:

Perhaps one reason for the delay in the systematic organization of instruction in the natural sciences is to be found in the fact that much educational experimenting was necessary before the material was at hand with which to form a judgment as to how this instruction could be best organized. The older subjects of study—Greek, Latin, mathematics—have long had what may be called a fixed educational form, which was in use in schools and colleges the world over. The newer subjects—English, history, the modern European languages, the natural sciences—have had to feel their way toward such a form, and even now complete agreement as to what that form should be has not been reached. But with us at Columbia the proper organization of our great opportunities for study in the field of natural science is of pressing importance and cannot be delayed. We have several different types of student to provide for, and we owe it to ourselves and to them to make the best possible provision for them speedily.

The need of dormitories to supply a social element lacking in the university is forcibly presented in the Report. The living together of college students Dr. Butler considers to be the characteristic of college education which most sharply differentiates it from secondary instruction. "College life and college spirit," he says, "are real things as well as most effective educational instrumentalities," and he pleads for dormitories as necessary, not merely for student comfort, but for securing to students the full benefits of college and university residence.

The discussion of the fifth topic is the culminating feature of the Report. Full justice can hardly be done to its masterly treatment of "the length of the college course and the relation

of that course to the rest of the work of the university" otherwise than by quoting in full the twenty pages which it occupies; but, as this is manifestly impracticable within the limits of this article, we must perforce content ourselves with detached fragments of this remarkable document.

Taking up first the standard of admission to the technical and professional schools, he observes that the policy, already recognized by Columbia University as correct in principle, of requiring a college course of liberal study as a prerequisite to the professional courses, does not pass everywhere unchallenged; and he cites the three objections raised by President Hadley of Yale against it. These are: "(1) That it tends to make the professions exclusive in a bad sense; (2) that it leads to a remodeling of the college course to meet the needs of professional students, which remodeling is at least a doubtful experiment; and (3) that it establishes an unfortunate distinction between the universities which require a bachelor's degree as a condition of admission to the professional schools and those which make no such requirement." Each of these arguments Dr. Butler answers in the course of his subsequent contentions. The Report then, after citing the additional objection that a college preparation for professional studies tends to prolong unduly the period of studentship and to delay, often until the thirtieth year of age, the definitive entrance upon professional life, continues:

In the face of such objections as these it is obvious that we at Columbia must consider carefully the probable social and educational effects of the policy upon which we have entered.

The questions which have been raised in the discussion of this policy are to be decided, it seems to me, from the standpoint of the duty of the university to the public and to its own educational ideals. Two interests are immediately at stake: the standards of professional study in a university, and the place of the American college in the higher education of the twentieth century. I doubt whether the two interests can be separated in any adequate consideration of the subject.

After quoting from President Eliot's impressive address at the Installation ceremonies on April 19 his remarks on the dignity and responsibilities of the learned professions, Dr. Butler proceeds:

With such an ideal as this held up before the student of law, of medicine, of divinity, of teaching, of architecture, or of applied science, what standard of excellence shall the university require of him when he enters upon his professional studies? Three answers seem to be possible: The university may require (1) the completion of a normal secondary school course of four years, and so put admission to the professional and technical schools on a plane with admission to college, or (2) the completion of the present college course of four years, or (3) the completion of a shortened college course.

Dr. Butler contends that a uniform policy in all educational matters in all American universities is unnecessary, but that they should in any case raise their standards of professional study above the minimum fixed by law and stand as leaders in American intellectual life. He then takes up seriatim the three answers above propounded. The inadequacy of the secondary school courses as a preparation for professional study is argued at length, and the first answer proposed is rejected for five reasons: (1) The immaturity of youths of from sixteen to eighteen years; (2) the deterioration of professional instruction when administered to classes in which such youthful students predominate; (3) the existence of numerous professional schools where students of that class are received, making it unnecessary for Columbia to join their number; (4) the lack in secondary education of the more advanced discipline in the liberal arts and sciences, and of the wider outlook on the world which are desirable in the professional student; and (5) "to admit students to the professional schools of Columbia on the same terms as to the College would be to throw the weight of our influence against college education in general and Columbia College in particular," by

drawing away directly to the professional schools many who would otherwise first pass through the College.

But while holding a secondary school education to be too low a standard for admission to professional study at Columbia, the President considers insistence upon the four years' college course as an excessive and unsatisfactory requirement. He says (the following quotations being abridgements of the full text) :

My objections to making graduation from a four years' college course a prerequisite for professional study at Columbia are mainly two:

1. I share the view . . . that the whole tendency of our present educational system is to postpone unduly the period of self-support.

2. Four years is, in my opinion, too long a time to devote to the college course as now constituted, especially for students who are to remain in university residence as technical or professional students. . . . At Columbia, and elsewhere, the practice of counting a year of professional study as a substitute for the fourth or senior year of the college course has in effect established a three years' college course for intending professional and technical students. The degree has been withheld until a year of professional study has been completed, in deference to tradition rather than from sound educational principle. In this way new conditions have been met without the appearance of shortening the college course. . . . From my point of view it (this policy) is open to criticism in that it (1) shortens the college course without appearing to do so, (2) divides the interest of the student in a way that is satisfactory neither to the college nor to the faculties of the professional schools, and (3) fails to give the full support to a college course of purely liberal study which is so much to be desired.

There remains a third line of action, namely, that of basing admission to the professional and technical schools of the university upon a shortened course in Columbia College or its equivalent elsewhere. This I believe to be the wisest plan

for Columbia University to adopt, as well as the one whose general adoption would result in the greatest public advantage.

One consideration of vital importance appears to have been overlooked in the numerous discussions of this whole matter, and that is the fact that there is no valid reason why the college course should be of one uniform length for all classes of students. . . . For the intending student of law, medicine, or applied science who goes to college, three or four additional years of university residence and study are in prospect after the bachelor's degree has been obtained. For the college student who looks forward to a business career, on the other hand, academic residence closes with graduation from college. For the latter class, therefore, the college course may well be longer than for the former. While two, or three, years of purely college life and study may be ample for the man who proposes to remain in the university as a professional or as a technical student, three, or even four, years may be desirable for him who at graduation leaves the university, its atmosphere, its opportunities and its influence forever.

It must be remembered, too, that the four years' college course is merely a matter of convention, and that there are many exceptions to the rule. . . . The question is not so much one of time spent upon a college course as it is one of the quality of work done and the soundness of the mental and moral training given. The peculiar service which the college exists to perform may be done in one case in two years, in another in three, in another in four, and in still another not at all.

Dr. Butler then shows that, while admission requirements to college have been materially raised so as to cover the equivalent of nearly or quite a year's work formerly done in college, and while other branches once pursued in college are now taught in the secondary schools, "the bachelor's degree has been steadily kept at a point four years distant from college entrance," thus increasing both the total amount of work requisite for that degree and the age at which it is ordinarily obtainable. This increase in amount of work done before

entering college does not appear when the entrance requirements in Latin, Greek and mathematics are alone considered; one must also take into account the requirements in English, in science and in modern languages. The editor of the *Independent*, in a recent criticism of the Report, has not only overlooked the fact that quite a number of studies formerly taught only in college are now pursued in the secondary schools, though not now required for admission to college, and belittled the claim of increased requirements in English, but he has missed the fundamental point that Dr. Butler is speaking solely for the College and professional schools of Columbia. The citation, in this criticism, of requirements in colleges which do not correspond to those of Columbia College is, therefore, wholly irrelevant. Other critics have fallen into the same error, and it is, therefore, necessary to insist on this point. The conditions which Dr. Butler is analyzing are those existing at Columbia, and the solution proposed is intended for Columbia University, and it is not claimed that it will necessarily fit the conditions elsewhere prevailing.

The conclusion of the President is

that Columbia University will perform the greatest public service if it establishes two courses in Columbia College, one of two years and one of four years—the former to be included in the latter—and if it requires the satisfactory completion of the shorter course, or its equivalent elsewhere, for admission to the professional and technical schools of the university. By taking this step we should retain the College with its two years of liberal studies as an integral element in our system, shorten by two years the combined periods of secondary school, college, and professional school instruction, and yet enforce a standard of admission to our professional schools which, both in quantity and in quality, is on a plane as high as the Columbia degree of bachelor of arts of 1860, which was recognized as conforming to a very useful standard of excellence. At the same time we should retain the four years' course with all its manifest advantages and opportunities for those who look forward to a scholarly career, and for as many

of those who intend to enter upon some active business after graduation as can be induced to follow it.

Under such a plan we should have in Columbia College four different classes of students: (1) Those who were taking the shorter course of two years in preparation for a technical and professional course, and who would therefore look forward to a total university residence of five or six years; (2) those who were taking the shorter course of two years but without any thought of subsequent professional or technical study; (3) those who felt able to give the time necessary to take the longer course of four years before entering a professional or technical school; and (4) those who, as now, take the four years' college course without any intention of technical or professional study. The second class of students would be a new and highly desirable class, and would be, for the most part, made up of earnest young men seeking a wider and more thorough scholarly training than the secondary school can offer, but unable to devote four years to that end. The third class of students would be able, by a proper selection of studies in the later years of their college course, either to enter a professional school with advanced standing or to anticipate some of the preliminary professional studies and to devote the time so gained to more intensive professional work. Undoubtedly many students who now take a four years' undergraduate course with no professional or technical end in view would take the shorter course, and that only, but on the other hand numbers of students would come to college for a course of two years who when obliged to choose between a four years' course and none at all are compelled to give up college altogether. The final result of the changes would certainly be to increase the total number of students taking a college course of one length or another.

Dr. Butler then declares his conviction, which is shared by the Dean of the College, that this shortened course could be made to include all the *prescribed* studies now required for the bachelor's degree, and thus be made to recover "something of the definitiveness and purpose" which undergraduate study, as now organized, too often lacks. This leads to the final ques-

tion—a question wholly distinct from and independent of that as to the requisite preparation for professional study, and in the President's mind one of far less interest and importance—that, namely, of the degrees of Bachelor of Arts and Master of Arts.

In answering this question, he points out that we may either, as at Chicago University, grant some intermediate recognition of the two years' course, conferring the bachelor's degree only at the end of four years of college studies; or give this degree at the end of two years and the master's degree at the end of four. It is the latter plan which the President prefers, and it is this preference which has elicited the most general criticism and opposition. Dr. Butler holds that such a change would give the bachelor's degree substantially the status and meaning it holds in France, or as is held by the German *Zeugnis der Reife* and the ordinary degree in course of the British universities. He also shows that it would then be on a par with the degree as granted by Columbia College in 1860.

In like manner the present significance of the master's degree, both here and in Europe, is discussed, with the conclusion that if the college courses were remodelled as proposed, that degree would be "an entirely appropriate reward for the completion of a college course four years in length." After discussing its significance in England, Germany and the United States, and citing the divergence of views regarding the policy that should control in granting it, which appeared in the discussions last February at the meeting of the Association of American Universities, the Report continues:

As an intermediate degree between those of bachelor of arts and doctor of philosophy, that of master of arts has been and is very useful at Columbia. It marks the close of a period of serious resident graduate study, and is an appropriate reward for the work of those university students who have neither the inclination nor the peculiar abilities and temperament to fit themselves for successful examination for the degree of doctor of philosophy. At the same time it must be

admitted that the rapid development of the elective system and the widely different standards of the scores of colleges from which our graduate students come have almost wiped out the distinction between the senior year in Columbia College and the first year of graduate study. To the best of my knowledge and belief, the fixing of the degree of master of arts at the close of a four years' undergraduate course would involve no real alteration in the standard required on the part of those coming to Columbia from other institutions. For students of Columbia College it would bring the degree within reach after four years of residence instead of five.

These suggestions, Dr. Butler believes, are less revolutionary than they may seem at first sight to be, and are, at least, a possible and practical solution of problems the answer to which we have hitherto made little progress in finding. If the policy therein outlined should become general, it would materially hasten the development of our whole educational system, reacting with stimulating effect on the secondary schools as well as on the colleges. The present difficulties and objections in the way of this policy Dr. Butler ascribes in considerable measure to low standards of admission to the colleges—"the weakest point in college administration. The general standard," he says, "of college education in the United States would be strengthened more if the weaker colleges would fix and rigidly enforce proper entrance requirements and concentrate all their money and energies upon two years of thorough college work than if they continue to spread a college course over four years with admission secured on nominal terms or on none at all."

It is then pointed out that in Europe the higher education is divided between the secondary school and the university, without that middle term which we call the college, and which is a distinctively American institution—"the strongest, as it certainly is the most characteristic, feature" of our system. It should be preserved and guarded, but its preservation depends upon its constant adjustment to changing conditions. "It seems clear that if the college is not so adjusted it will,

despite its recent rapid growth, lose its prestige and place of honor in our American life, and that it may eventually disappear entirely, to the great damage of our whole educational system."

Dr. Butler's contentions are not easily to be controverted. Differences of opinion will certainly be entertained regarding many things that occur in this Report; and they were obviously expected by its author. There are statements of fact which some will challenge. There are conclusions which will be unpalatable to some, and whose logical sequence from the premises laid down they will strive to overthrow. The forecasting of the future effect of new measures cannot be reduced to a mathematical process. It is very certain that custom and tradition have a firmer hold upon our colleges and their constituencies than some would willingly admit. All these circumstances will subject the propositions and conclusions of this Report to the most exhaustive discussion; and this is as it should be. Whether its specific recommendations shall find universal acceptance and adoption or not, the Report will compel the critical reëxamination of positions hitherto accepted unquestioningly, as if they were beyond the reach of argument. The problems it attacks are serious, pressing, vital to the welfare of the commonwealth. The complaint is frequent and common in the newspaper press, from scores of parents, and from college and university teachers and administrators, that the present organization of our higher education is wasteful, that the course is too long in preparing for life, and that the relations of the college to the professional schools are not well adjusted. The Report offers one definite and logical solution for these difficulties. If the solution proposed is not satisfactory, is it not incumbent upon those who dissent from it to propose some other? We can hardly plead *non possumus* in the face of the criticism, both from outside and inside the universities, directed at the present condition of things. The Report will compel the educators and the public to think seriously before they reject the solution offered. In the discussion

which must come, many points will be clearly discerned which have been overlooked in the heated outbursts that have already been heard from some whose settled views the Report has assailed. The arguments advanced by the President, and which thus far those who attack his conclusions have almost totally evaded, must be squarely met, and either answered or accepted. It will be seen that the question of degrees is wholly independent of the question of preparation for professional study, and indeed, of secondary importance; that nowhere in the Report is it argued that two years of the existing college course, either at Columbia or elsewhere, are adequate qualification for the bachelor's degree, but only that by suitable revision they may be made to be so; and that it is no answer to a proposition made wholly with reference to conditions prevailing at Columbia, to say that it does not fit conditions prevailing somewhere else.

We may well, in the light not only of Dr. Butler's recommendations, but also and especially of the arguments on which they are based, review all our traditional theories of education, with the purpose of rejecting all those that are not founded upon "right reason"; and the blame is ours if, discerning the truth beneath the cloak of traditional error, we lack the courage to accept the new revelation and to occupy the advanced positions to which it inevitably points.

A. D. F. HAMLIN

THE PROBLEM OF ATHLETIC CONTROL

THE athletic problem is the *quæstio vexata* of university administration. Along with much that is good and much that—whether good or evil—is inevitable, it involves three elements of danger, which, by common consent, in the interests of the university, require regulation. These are:

First.—The tendency, on the part of the students, to excessive devotion to athletics, to the detriment of their serious work and of the intellectual interests of the university.

Second.—The danger of wasteful and dishonest financial management, with its resultant evils of demoralization to the students and disgrace to the university.

Third.—The temptation to seek success in athletic competitions by dishonorable and unsportsmanlike methods, such as the introduction into the teams of men who are not *bonâ fide* students, or who are tainted with professionalism.

Other evils flowing from the devotion of American college students to the athletic ideal must be left to time to cure, or must be endured. But the three tendencies above mentioned cannot be left to time or chance to correct. They must, in the interest of the universities themselves, in some way or other, be brought under regulation and control. This principle is now generally recognized and acted upon by all the leading American colleges. They differ only in the extent to which, and the mode in which, the control is to be effected.

It seems clear that the regulation of the first of these tendencies—that toward an excessive devotion to athletic interests, to the neglect of the intellectual interests of the students concerned—must devolve upon the university authorities, and that it cannot safely or properly be delegated to any outside authority. The duty of maintaining the supremacy of the intellectual ideals for which the university stands, as well as the duty which the university owes to the student and his parents, of protecting him against the demoralizing influences of the athletic ideal, must be performed by the university itself. In other words, scholarship eligibility rules and rules limiting the time which may be devoted to athletics must be made and enforced by the university authorities.

As to the other two dangers under consideration—that of wasteful and dishonest management, and that of unfair competition—the duty of the university is less obvious and less direct. As commonly conceived, it is not one of the university's functions to control the outside activities of the students, except in so far as these activities infringe upon the organized intellectual life of the university. The university is, indeed,

vitality interested in the preservation of the good name and the peace of her student-body. But she is under no immediate duty to play the role of constable or of *censor morum*, herself. She may delegate those duties to others.

It is at this point that differences of opinion appear. At one extreme we find the view that such matters should be left entirely to the student-body, by which is meant the athletically-minded portion of the student-body. At the other extreme we have the practice, which has come to prevail at most of our eastern universities, of absolute faculty control—the authorities prescribing minutely the conditions on which the right of participation in athletic contests may be gained, and enforcing compliance with its rules by exclusion from athletic teams, by the actual prohibition of certain sports and, in extreme cases, by the infliction of academic penalties.

The objections to the *laissez faire* plan are its inadequacy either to furnish a present remedy for the evils complained of, or to supply any effective training in the self-control and manliness upon which it relies to effect a permanent remedy. The objections to the plan of complete faculty control are that it impairs the dignity and influence of the university by making it a party to the petty controversies of the students in their non-academic relations, and that the moderate measure of success attained by the system is achieved at a great cost and with much friction.

Of the former plan it may be said at once that it has been fully tested and has been found wanting. Indeed, it is due to the general confession of its inadequacy to deal with the evils of the situation that the alternative plan of faculty control has been adopted. The comparative decency of student athletic management in a single university, all of whose rivals and competitors are under rigid faculty control, does not show that unrestricted student control is a good thing, but on the contrary that the influence of faculty control is not limited to the university immediately affected, but extends to all rival institutions. But the failure of the system of unregulated student

control does not necessarily involve the adoption of the alternative system of direct control by the university authorities. It still remains to be seen whether the disadvantages of that plan do not outweigh its advantages and so suggest the desirability of seeking a solution of the problem in another and different direction. Before answering this question it will be necessary to look a little more closely at the elements of the problem.

Of the two mischievous tendencies still under consideration, the demoralization caused by student financial mismanagement is at once the more dangerous and the more easily brought under control. Our experience during the past three years has made it perfectly clear that such regulation is absolutely necessary and that the university can perform the task of providing it with complete success. From the point of view of efficient administration, no better system could be desired. The grave, and, it seems to me, the fatal objection to this plan is that it sets the university to the task of administering affairs which are not its own and which have no relation to its proper function in the community. If, in so doing, it were affording to its student-body a training in self-restraint and in the prudent management of financial interests, large or small, something might be said in justification of the university's assuming this trusteeship. But this justification is manifestly lacking in a system under which the financial control exercised by the university deprives the students of all actual power in dealing with the athletic funds. The virtue of the system is a purely negative one—that it prevents wasteful expenditure of athletic funds. The objections to it are that it imposes a heavy and unnecessary burden on the university, that it emphasizes unduly and somewhat offensively the official distrust of student management, and that it affords no opportunity for the competent and right-minded of the students to manage their own affairs. It is true that some effective control is requisite. But it need not be university control, it should not be an obtrusive control, and it should allow for as much student participation as is compatible with safety. It

is believed that these ends can be secured without endangering the substantial results of the present arrangement, by a system of coöperation between graduates and undergraduates interested in athletics, whereby the judgment and experience of some of the wiser heads among the alumni shall be placed at the service of the university.

The remaining difficulty—that of keeping college athletics free from professionalism and kindred evils—constitutes the principal business of faculty control, both at Columbia and elsewhere, and is the despair of faculty committees. The semi-annual conferences of faculty representatives of half-a-dozen eastern universities are almost exclusively devoted to the discussion and framing of amateur eligibility rules and the like, and there is, even among some of these men, who have grown old in the service, a growing sense of the futility of their labors. The difficulty which presents itself is that college officers are, by reason of their age, their preoccupation with other and very different interests and their imperfect sympathy with that side of student life, too often but poorly fitted to perform the delicate and difficult tasks which they have assumed. The questions involved, though passionately raised and contested, and bristling with points of irritation, are trivial in themselves, involving usually no moral or academic considerations, and having no relation to the life and the aims of the university. There is something incongruous and even absurd in the spectacle of the university turning aside from its high functions to wrestle with the problem whether a man who has been a member of another college team shall be eligible to participate in the athletic activities of the student-body of which he is now a member without having purged himself by a year's residence; or to decide the question whether a student, by playing ball during the summer as a member of a "summer nine," or who instructs the boys of a summer camp in swimming or rowing, has thereby forfeited his standing as a college amateur. The distinctions which these problems involve are so purely conventional, and the whole matter is so

remote from the business of the university, that it is not to be wondered at that the men who have given the subject the most thoughtful consideration are growing more and more doubtful of the wisdom of the policy of faculty interference in such matters.

It is not to be denied that this policy has met with some degree of success. It has certainly checked the worst abuses of the old system, and it has, in addition, performed the inestimable service of setting before the student-body a high ideal of sportsmanlike conduct—a service whose benefits have not been confined to the few academic communities in which it has been rendered. That, notwithstanding these achievements, the system has, after many years of trial, failed to commend itself to a majority of our American colleges, and is openly flouted by some of them, that it is, in fact, showing signs of breaking down in some of the institutions that have most persistently advocated it, seems to be due to a growing recognition of the fact that the situation is actually beyond the control of the university authorities. No method of official supervision can be devised which will not leave the most vigilant faculty committee at the mercy of a dishonest student management. Accordingly, in their efforts to deal with a situation which they are powerless to control, university authorities have surrounded the athletic activities of the students with a bristling hedge of artificial restrictions, which cannot be strictly enforced without constant friction and occasional injustice, and which cannot be relaxed to meet exceptional cases without creating an impression of vacillation and uncertainty which tends to bring the whole system into contempt. Under a faculty management which is at once wise, firm and sympathetic, these evils will be minimized and the administration command a real though grudging loyalty on the part of the athletic interests. But where the management is of the more usual sort—sometimes hard and technical, and, again, weak and complaisant—the mischievous results of the system become too plain to be disguised. And over it all is

the curse which always attends the exercise of arbitrary power and the gratuitous assumption of responsibility in matters with which the authorities have no direct concern—a lamentable crop of suspicion, deception and wilful evasion of rules on the one side, and, on the other, a certain resentment at the expenditure of precious time and energy to little purpose, a lessening of respect for the boy and his ideals, and a growing cynicism and hardness.

Perhaps no consequence of the present excessive devotion to the athletic ideal in our colleges is more deplorable than the readiness with which the charge of dishonesty in athletics is brought by one student-body against another and unquestioningly believed. Probably no statement could be made on the Yale campus which would meet with readier and more general acceptance than a declaration that the athletic management of Harvard, or of Columbia, or of Princeton, or of Pennsylvania was corrupt, and few of the students of those institutions would doubt the truth of a similar charge brought against Yale or any other rival. But the accusation of “offensive partisanship” is not confined to the student management which commits the shameful acts charged, but is leveled as well at the faculty committee which connives at them or weakly permits itself to be deceived by them. It would seem that a system which involves the university in the unhappy disputes of its student-body with their athletic rivals, and which at the same time multiplies points of irritation between the authorities and the students of the university, should have the argument of inevitable necessity to justify it.

It seems clear that no such necessity exists, and that the moderate measure of success within the reach of the system of faculty control could easily be attained by securing the active coöperation of the graduate body of the university. Indeed, it would seem that in that direction, and in that direction only, lies the complete solution of our problem. For, as the great evil of the present system is not the occurrence, now and then, of unfair and dishonest practices, but the existence of a

public sentiment which permits and condones those practices, so the real end to be sought is not primarily or chiefly the exclusion from the athletic teams of quasi-professionals and of men who are not *bonâ fide* representatives of the university, but the creation of a conscience and a public sentiment in the student-body which will render such practices abhorrent and impossible. That this ideal of honorable and sportsmanlike conduct which the university authorities have set before the community is fairly within the reach of the graduate and undergraduate members of the university will not be doubted by any one who has had experience of the clean instincts and the generous spirit of a college community. But that mere example and the compulsion of authority will ever make this ideal acceptable to that community will not be believed by any one who knows its faith in itself and its jealousy of external control. It is to the students, then, and to that great body of graduate members of the university, which so persistently cherishes the ideals of its undergraduate life, that we must look for the solution of the problem of "clean" athletics. The present student management of the several sports, with a strong central committee of alumni who command the confidence of faculty and students alike, should be adequate to the accomplishment of these ends.

The achievement of this plan of non-official control may well be left to the new powers so constituted. But there is one principle so obvious and so clearly essential to the lasting success of the system that it may well be embodied in its constitution. This is the principle that the qualifications for membership on competing university teams must be substantially the same, and that eligibility rules—many of them necessarily artificial in character—are essentially matters for agreement between the institutions concerned in inter-collegiate contests. It should, therefore, be the first business of the student and graduate managers to enter into formal engagements with the athletic interests—whether official or non-official—of rival institutions, respecting the qualifications of members of the

several teams. The rules thus adopted need not be identical in all cases and for all classes of sports, though a general agreement on a uniform system of rules, perhaps as the result of some federation of the athletic interests of rival institutions, might easily be the outcome of such efforts. This has been accomplished with conspicuous success in the case of certain sports—as in the Intercollegiate Rowing Association—and the principle seems, under such conditions as are here prefigured, to be capable of indefinite extension.

It is plain that the success of such a system will depend quite as much upon the way it is dealt with, upon the hands into which it falls, as upon its essential soundness. For this reason—that the plan may not be marred in its inception—it is essential that the wisdom of the university shall preside over its birth and brood over its destiny. In the institutions which have assumed control over student athletics, the Faculty Committee may well be charged with the duty of superintending and directing the organization of the athletic interests of the university in accordance with the principles herein set forth.

The working out of these principles into a definite scheme of organization should not be the work of one man, but should be the result of the combined wisdom of the graduate and undergraduate members of the university as well as of its official representatives. Indeed, it would seem that the plan—if it is to be launched with fair auguries of success—must have the sanction which comes from such coöperation of all of the elements of our university life whose interests are involved in it.

It is with the hope of enlisting the interest and coöperation of all of the various agencies in which the college spirit of Columbia so abundantly manifests itself that these suggestions are here presented.

GEORGE W. KIRCHWEY

THE ORIENTAL LANGUAGES AT COLUMBIA
UNIVERSITY

IN the *Columbia University Bulletin* for March, 1898, the undersigned gave an account of what had been done at Columbia in the interests of Oriental learning from the time when the Rev. Johann C. Kunze, S.T.D., was appointed "Professor of Oriental Languages" in 1774. Since the year 1898 the eyes of the whole world have been fixed upon the East. The Chinese-Japanese War, the occupation of parts of the Yellow Kingdom by American and European military forces, our own occupation of the Philippines, are only the principal events which have brought to our consciousness the feeling that problems, the most serious in character, are here presented to the modern world for solution. The entrance of Admiral Dewey into the harbor of Manila, whatever we may think of the subsequent march of events, has laid a burden upon us which we cannot lightly put off from our shoulders. In the western march of modern civilization the shores of Asia have been reached; and that vast continent in which the cradle of human civilization was rocked bids fair now to emerge from its sleep of ages. New forces loom up before us; and in directing these forces for the benefit of humanity, the United States is bound, if only because of its geographical situation, to take a prominent part. It will do its work well if it is well prepared. It is bound to fail, if it lacks foresight and good understanding; and in so preparing itself, the universities must of necessity take a prominent part, not only in studying the various political, social and economic questions that arise, but also in fitting out the men who shall have a hand in their ultimate solution. The action of the government at Washington in recent years in appointing university men upon commissions of enquiry, shows that the authorities are alive to the part which our schools of learning may take in this new development.

There is every evidence to show that in this development Columbia is destined to take a foremost place. Up till now she has devoted her slender resources to a study of hither Asia, and in an especial degree to a study of only the past history of the countries comprised under that designation. The founding of the Department of Chinese in the year 1901 marks a most important step in advance. Though nominally devoting itself to a study of the civilizations evolved by the devotees of Confucius and Laotze, both the generous donors who have made this advance possible, and the authorities of the university have a much larger prospect in view; it might more properly be called the Department of the Far East. Its development, so as to include Japan, Corea and the Malay peoples, is evidently looked forward to; and the time cannot be far distant when the division of Oriental languages at Columbia will comprise such a department of the Far East in addition to the already existing departments of Semitic languages and Indo-Iranian languages.

The term "languages" in the title of the division is perhaps a little misleading. It is a relic of previous times, and an evidence merely that the problem at Columbia was first attacked in a modest way from the linguistic point of view. The programme of the department clearly shows that, while it looks upon the study of Eastern languages as the basis of any serious study in Eastern civilizations, language is regarded merely as the hand-maid to assist the student in his search after truth. In the article referred to above (p. 102) the undersigned complained that it was impossible to make any provision at Columbia for the study of ancient history, ancient art and archæology, ancient literature and ancient religious forms. The appointment of Professor John Dyneley Prince as Professor of Semitic Languages together with the undersigned, has enabled the division to take a step forward towards satisfying this urgent need. Professor Prince comes to us from New York University, and his many-sided scholarship, together with his practical knowledge of the East, will greatly enlarge

the scope of the Semitic department. In conjunction with the department of history three new courses have been established in ancient history: First, on the ancient history of Western Asia from the earliest times until the period of Alexander the Great, to be given by Professor Prince; a second on the history of India and of Persia, to be given by Professor Jackson, and a third, on the rise of Arabian civilization and the spread of Mahomedanism, to be given by the undersigned. To these will now be added the course in Chinese History to be given during the second term by Professor Hirth, the incumbent of the Dean Lung chair. A course in Coptic has also been offered by Professor Prince, and a beginning thus made for the study of the civilization of Egypt which has hitherto been so notoriously neglected at our American universities.

Absolutely necessary as is such a study of the past in order to understand present conditions and future possibilities, a study of the Orient as it exists to-day is equally essential if the university is to remain in touch with the life around it, and do that service which must be its greatest claim to consideration. President Butler in his Annual Report for 1902 (p. 54) calls attention to the fact that the study of the peoples of Eastern Asia is carried on in Europe from three different points of view: the philological and literary, the ethnographical and anthropological, and the practical. Three classes of institutions, universities, museums and special schools, carry on separate instruction in these branches; and President Butler very properly speaks of "the consequent waste of money and of energy, and loss of effectiveness." With the experience gained from a careful investigation of what has been done in Europe, we can evade such loss. The philological and literary, the ethnographical and anthropological subjects are already represented at Columbia; and we have here the nucleus of such a school for the study of the modern Orient as is possessed by no other university in the land. It is along such lines that the future development of the division

of Oriental languages must be laid. Courses are already offered in modern Arabic, Turkish, Persian and Chinese, which properly supplement those courses which deal with the ancient Orient. The newly founded division of the Fine Arts, the courses in economics given by the School of Political Science, the courses in modern history, make it possible for a student devoting himself to these branches to prepare himself in the fullest way for his future work.

The need of such a school for the study of the modern Orient is becoming every day more apparent. We can no longer afford to send consular and diplomatic agents to the Far East who are entirely unfamiliar with the languages, the history, and the civilization of the country to which they are going. This view is by no means new. The political advance in the East, of England, France, Russia and Germany, has been due in a large measure to the fact that the men who have been their representatives and their workers there have been trained in their Oriental schools. The American Government, early in the nineteenth century, saw very clearly the necessity of such training. In 1826 it sent William D. Hodgson as Attaché to the United States Consul at Algiers for the purpose of enabling him to become familiar with Oriental languages. Mr. Shaler, the American Consul at that place, wrote to Henry Clay as follows: "I am very much pleased to find that the Government have at length determined to avail themselves of the great advantages offered by the Barbary Consulate for the instruction of young men; it must result in important benefits to the public service." Mr. Hodgson, at a later time, became secretary and dragoman to the United States Legation at Constantinople, and in 1841 Consul at Tunis. Not only did he render good services to the country which he represented, but he also became a well-known Oriental scholar (*American Oriental Society Proceedings*, April, 1892, p. cxl). This policy on the part of the government was not persevered in; probably because with the settlement of the question at issue with the Barbary States our government lost

its interest in the East. Now that its interest has been revived, it is only proper that the work of training public servants for service in the East should be taken up again.

The interests of the United States in the East are, of course, not political ones. They are of a purely commercial and industrial character. But here also a proper knowledge and understanding of the East is absolutely necessary for those who are to make a success of their commercial dealings with Eastern nations. In these days of competition he who best understands the needs of these countries, he who best knows how to avoid offending the susceptibilities of their peoples, will be the one to gain the coveted success. It is to be hoped that at some day a School of Commerce will be established at Columbia, and the division of Oriental languages will furnish its quota of the courses to be offered by such a school.

In connection with this subject, the following extracts from "A Brief Retrospect of the Eighteenth Century" by Samuel Miller, A.M. (New York, 1803), present an interesting sketch of the first establishment of courses in the Oriental Languages at Columbia College:

EXTRACTS FROM "A BRIEF RETROSPECT OF THE EIGHTEENTH CENTURY," BY SAMUEL MILLER, A.M., NEW YORK, 1803

In 1779 the office of instruction in the Hebrew language was added to a professorship, then held in the University of Pennsylvania, by the Rev. Dr. Kunze; but few availed themselves of the opportunity thus afforded for gaining a knowledge of this ancient tongue; and the professorship was continued only for a short time. In 1784 Professor Kunze removed to the city of New York, and was soon appointed to a station in Columbia College, similar to that which he had held in the University of Pennsylvania. This professorship had a slender support afforded to it, by an annual allowance from the legislature of New York, for five years; but at the end of this time, the allowance being withdrawn, the department of Oriental instruction was discontinued. This is one among the several

instances of disreputable literary retrocession by which the United States were distinguished at the close of the eighteenth century.

Professor Kunze, soon after receiving this appointment in Columbia College, entered on the duties of his office with an enlightened and ardent zeal. That he might be more extensively useful, he took the earliest opportunity of sending to Europe for a number of curious and voluminous works in Oriental literature; and resolved by this means not only to furnish himself with the best publications for teaching the Hebrew language in the most profitable manner, but also for initiating his pupils into the knowledge of the Arabic and Syriac dialects, for which he was abundantly qualified. But all his exertions were rendered abortive by the unreasonable and misplaced economy of our legislators, who have not infrequently acted as if they considered the interests of literature among the most unimportant objects of their attention.

.

The various acquirements of this gentleman, and particularly his Oriental learning, have long rendered him an ornament of the American republic of letters, and he has probably done more than any individual now living to promote a taste for Hebrew literature among those intended for the clerical profession in the United States. And though his exertions have not been attended with all the success that could have been wished, owing to the want of that countenance from the public and from individuals, which is necessary; yet he is doubtless entitled to the character of a benefactor of the American churches.

RICHARD J. H. GOTTHEIL

THE PHILOLEXIAN SOCIETY AT COLUMBIA

ITS HISTORY FROM 1802 TO 1902

I. FOUNDING OF THE SOCIETY

ONE of the most interesting chapters in the annals of student life at Columbia is that which records the history of the earliest of Columbia's student organizations.

The founding of the Philolexian Society is shrouded in obscurity. The most we know of its beginning is that it was founded in the year 1802 and has therefore reached the one hundredth anniversary of its existence. In age it is exceeded by few societies of a similar nature in this country.

The Dialectic and the Philanthropic Literary Societies of the University of North Carolina founded in 1795, and the Philologian and Philotechnian of Williams College, both, curiously enough, also organized in 1795, antedate it by seven years.

That there was, however, a literary society at Columbia College even previous to this date seems unquestionable. In Holt's *New York Journal* of May 17, 1768, there is an account of the eleventh annual Commencement of Columbia College. In the mention which is made of the exercises on that auspicious occasion it is stated that Benjamin Moore and Gouverneur Morris of the graduating class were awarded silver medals by the "Literary Society" for superior excellence in oratory and composition. It is likewise well established that prior to the Revolutionary War, Alexander Hamilton graced the membership of the Literary Society which was then in existence, and delivered before it some strong youthful speeches.

In the old college at Forty-ninth Street in the Library Building there formerly hung a certificate of membership in the "Columbia College Society for Progress" of John B. Johnson of the class of 1792. The president who signed the cer-

tificate was John P. Van Ness of the class of 1789. In 1795 this society became extinct. From this time on for a couple of years the various classes, it is believed, had each their own literary associations.

In 1801 the junior class of the college which had formed one of these literary associations, designated it by the name of Philomathean. One year later, in 1802, this society, membership in which had formerly been limited to members of the junior class only, was thrown open to all undergraduates and the name changed to the Philolexian Literary Society of Columbia College.

The Philolexian Society was therefore founded in the spring of 1802, probably on May 17, by certain members of the senior class, prominent among whom are believed to be N. F. Moore, later a president of the college, and Hubert Van Wagenen. The society seems immediately to have become very popular, and its roll soon included the foremost men in college.

The object in forming Philolexian was presumably the same as that of the several previous societies in the college—mutual improvement in oratory and composition. In as much, however, as none of these societies had been of any long duration, with the single exception of the Columbia College Society which lasted about eight years from 1787, and as the same students had founded the Philomathean in the previous year and had suffered it to die out, it is not likely that they had any further design or expectation in establishing the Philolexian than to make it a source of improvement and pleasure to them during their own college days.* Various causes, however, combined to make it permanent, the chief of which occurred in 1806.

After the organization of Philolexian each succeeding freshman class had its literary association in order to prepare for the debates in the larger society. These freshman societies, it has been surmised, originated in the unusual awe in which the freshmen held the upper class men and their unwillingness

* Programme, May 17, 1852.

to speak before the members of the higher classes without previous rehearsal. Hence they held weekly meetings for that purpose. At this time they were, however, eligible for membership in *Philolexian*. Until the vacation in the summer these freshman meetings continued.

Finally in the fall of 1803 an imperfect organization was created under the name of the Freshman Society. The members of the incoming classes were admitted to membership in either this society or the *Philolexian*. This continued to be the situation of affairs until 1806. In this year it was decided to separate the two more distinctly than ever before. Members were allowed to choose in which they would remain, and a nearly equal division having been made, a new society, the *Peithologian*, was fully organized, and that friendly rivalry commenced to which both societies are probably indebted for their unusually long existence. Great interest was taken in these two societies by the undergraduates and also by the alumni of the college, and that interest has ever since been maintained.

From its foundation to the present time there has been no period in which *Philolexian* has not been in existence. There have been times in which the society was in a very weak condition, but its records establish the fact that it has had a continuous existence during the century that has past.

It is manifest that a society like this must have its ups and downs. There have been times in its history when the deepest depression prevailed, but in every instance the members have proved themselves worthy *Philolexians*. The *Peithologian* owed its organization to the influence of *Philolexian* members, and when that society had reached its ebb tide it was resuscitated by *Philolexians*. The Barnard Literary Association organized in 1878 as a protest against the then-prevailing spirit in *Philolexian*, was given its life by *Philolexian* members.

When in 1893 the Debating Union was instituted it was due to the suggestion of *Philolexian* men. In every onward

step that has been taken at Columbia in literary and debating circles the ancient and honorable Philolexian Society has always been the leader.

The records of the society, which are surprisingly complete, are filled with interesting matters of every description. They form a most important part of that fascinating section of the library known as the Columbiana Collection. The old minute books, which form a continuous record since October 10, 1823, teem with interesting material; the account and receipt books are unique, dating as far back as 1812. The volumes of addresses delivered before the society contain striking examples of oratory; while one or two slim books of anniversary and installation speeches by the presidents of Philolexian are exceptionally entertaining. The *Philolexian Observer*, published by the members of the society and the first student paper of any kind at Columbia, contains many praiseworthy essays and dates as far back as 1812. The records of the society in the Trustees' books show the influence the society once had and the far greater paternalism on the part of the faculty that formerly obtained. The published constitutions with the by-laws of the society are all-important records and contain much that is valuable; and the reminiscences of the members of the society have been of the greatest assistance in collecting anecdotes and incidents that would otherwise have been wholly forgotten.

It is the purpose of this history to review the occurrences of these one hundred years of the society's life.

II. RELATIONS WITH TRUSTEES

The meetings of the society in its early years were probably held somewhere in the old "King's College" buildings, situated between what are now Barclay and Murray Streets; but it is difficult to say exactly where it was housed for many years. Certain it is, however, that in the year 1821 there was some discussion between the two societies and the Trustees as to the location of their rooms. An extract from the minutes of the Trustees dated July 9, 1821, reads as follows:

RESOLVED, that for the accommodation of the Philolexian and Peithologian Societies, a suitable building be erected; and that the Committee of Repairs report to this Board a plan and estimate, with the site thereof;

That the right of membership in the societies shall not necessarily terminate with the undergraduate course;

That the presiding officer of each of the societies shall be a graduate member.*

These resolutions further asserted the principle of direct control of the societies by the Board.

Apparently the building mentioned in the resolution was never erected, but rooms were assigned to the societies. These conditions imposed by the Trustees, especially the one with reference to having the presiding officer of the society a graduate, were a source of much controversy. The discussion on this point seems to have continued for many years. The societies, always more or less displeased with their accommodations, were continually complaining; while the Trustees, on their part were usually, it would seem, ready to listen to the complaints of the students; for the records of the society and the Trustees' minutes show the continuation of this controversy at spasmodic intervals.

On the 9th of October, 1829, a joint committee of the two societies was appointed to consider with the Trustees the subject of the advisability of the admission of freshmen into the society, which the Trustees now deemed it wise to prohibit. The societies were most reluctant to yield to the mandate of the Board, on this occasion even presenting a petition to the Trustees insisting upon the admission of freshmen as members under restrictions hereinafter to be made. These restrictions were five in number—and curiously indeed do they read to us of the present day.

- (1) The candidate must be fourteen years of age.
- (2) He must be fully matriculated.
- (3) He must be proposed by at least three members.

* Volume III, page 48.

(4) Four fifths of the members present must vote for his election.

(5) He was ineligible to hold any office in the society.

These limitations proposed by the societies proved acceptable to the Trustees, who acceded to the request of the students.

On February 6, 1837, there is the following minute: "The Philolexian Society through their committee respectfully represent to the Board of Trustees of Columbia College that the room at present occupied by the society is in a condition alike inconsistent and discreditable. They would therefore solicit from the Board the same aid that has lately been extended to their sister society." It would seem from "a Memorial of the Columbia Peithologian Society to the Honorable Board of Trustees (1839)" that the aid referred to consisted in changing the room of that society, and it seems likely that the appeal of the Philolexian was also successful.

While this was going on still another agitation seems to have been prevailing, the most vehement of all the discussions between the students and the Trustees. This dispute referred to the oft-raised question as to the conditions on which the society held its rooms.

On November 22, 1839, a memorial to the Trustees was presented, signed by a committee of five, composed of John Mason Knox, P. Remsen Strong, Wolcott Gibbs and Robert D. Van Voorhis. Three days thereafter a letter was written to President Duer of the college by John M. Knox on the same subject, dated Monday, November 25, 1839. Among other things, the writer says: "The articles which close the report will, it is confidently expected, meet the approval of the Trustees, and the society respectfully requests the President's influence in their favor. If opportunity should arise in the Board, I must respectfully request the subject to be laid over until the next meeting of the Board, to allow time for conference in the society, and the request will, I trust, if necessary, be acceded to, as the society has manifested a decided willingness to yield partly to the conditions which they do not believe to be at present in force."

The Trustees replied tersely and forcibly. They refused absolutely to accede to the petition. The letter of the Trustees was written by no less a person than the President of the College, William A. Duer.

In January of the following year the two societies, Peithologian on January 11, 1840, and the Philolexian five days previous, requested that the key to the societies' rooms be entrusted to the vice-president of each society. This request met with as curt a refusal from the Trustees as the other.

The student sentiment on the subject appears to have been so strong that the controversy lasted for many years. There is a letter in existence signed by Charles King, President of Columbia College, dated June 4, 1851, addressed to the two societies which shows that the Trustees insisted on the absolute control of the rooms by the President, and stated this in such positive terms as put a final end to the controversy.

"These were the days," writes William Allen Johnson of the class of 1853 in an entertaining recollection, "when Columbia College was still on its original site on the then narrow Church Street, at the end of Park Place, and the grammar school under Professor Charles Anthon on Murray Street, close by. The buildings of the college looked well facing on the little green, on which grew some of the most gigantic buttonwood trees I have ever seen. Near the corner of Church and Murray Streets was a well-known cake shop—Shaddle's—much frequented by lovers of sweets among the students.

"In one of the gloomy basement rooms of the college the accomplished Professor James Renwick discoursed on chemistry and natural philosophy, but the boys called it 'Jemmy's Den,' and to the evil influences of the room and atmosphere the most virtuous students succumbed as to their behavior.

"It was in two of these basement rooms that the Philolexian and Peithologian Societies held their meetings, the former on Friday evening of each week."

It should be remembered that in the fifties the classes were small in numbers, and in the words of another alumnus of

Philolexian, upon "the termination of our three-hour lectures the students immediately scattered to widely distributed homes. There were no college athletic facilities to keep them together; and the faculty was so opposed to favoring athletic exercise that even a delay on the college green was an interference with the regulations. You will therefore see there was very little social intercourse of the students." The literary societies then represented practically the whole of student life. They played a role of far greater importance in student activity than at present, and on their activities were centered all the best efforts of the students. Eventually the restrictions upon them were removed, although the exact date is unknown. It is to be presumed that as the Trustees came to realize that the students were really able and fitted to conduct their own affairs, the restrictions were no longer necessary. This change took place about the time when the college removed to its new home on 49th Street and Madison Avenue, in 1857.

ERNEST A. CARDOZO

SOME PRESSING PROBLEMS

EXTRACTS FROM AN ADDRESS BY PRESIDENT BUTLER AT
THE MINNEAPOLIS MEETING OF THE NATIONAL
EDUCATIONAL ASSOCIATION

Mr. President, My Fellow-Teachers, Ladies and Gentlemen:

No one who meets year by year with the membership of this vast national Association, and no one who rises to face an audience like this, can permit himself to doubt for an instant the vitality and public importance of our present-day educational problems. As a great people, we seem to the world to be more concerned with matters of government, of finance, of commerce, and of trade; but every true American citizen knows that deep down in the heart and conscience of the people lies serious concern for questions of public education. We have

convinced ourselves, and it may prove to be our lot to convince the world, that education lies at the basis of democratic institutions, of material prosperity, and of the public weal.

We, who are born, as it were with the golden spoon of a rich and ripened civilization in our mouths, hardly realize how new this point of view is, or how recently it has obtained recognition among the peoples of the earth. It is, as the studious teacher knows, the offspring of the thought of the century which has but just closed. So rapidly has that thought progressed, so manifold have been its conquests, that we accept as axioms propositions of which our grandfathers had hardly ever heard. They might have read of them in the writings of the philosopher or the publicist, but it was beyond the dream of their wildest imagination that these great truths and principles should within any reasonable time conquer the intelligence and the conscience of a great nation of freemen.

I hold that we have not come together here merely to discuss and consider questions of technical and professional concern. Some of the questions which we consider, and some of the papers and addresses to which we listen, relate themselves more directly, it is true, to general public interest than do others, but there is no question, whatever the topic, presented to the members of this Association assembled in their great annual meeting, which is not in a sense a question that touches the public welfare, because it bears upon the life-history of some one individual child.

It goes without saying that if we were dealing with a series of problems which had been solved, if we were dealing with a series of events which had been halted, and with a scientific life which had been lived, our task here and elsewhere would be little more than one of anatomical dissection. We might pick apart the limbs of the dead body to allay and satisfy our curiosity, but the public at large would care little for what we said and did. It is just because the reverse is true, and because we are dealing with living truths, developing before us and thrusting living problems upon us while we speak—it is

because of this that these discussions of ours are of such vital and far-reaching public importance.

It is because I believe so absolutely in the practical importance of these problems, and because I am so entirely convinced of the general public interest in their right solution, that I shall undertake this evening in a few brief moments to discuss with you two matters which seem to me at this time to deserve most careful attention from us and from our fellow-citizens. I do not undertake to say that I have chosen for discussion the two most important and the two most significant problems, because as to that we might honestly differ; but I do hold that the two matters which I propose briefly to discuss are problems pressing for solution at your hands and mine, and important in the highest degree.

[Here follows a careful and detailed discussion of the subject of waste in present educational methods. As some of the aspects of this question treated in this address are also considered at length in the extracts from the President's Report, given on other pages of this issue, we give below only the final paragraphs of this part of the address].

I am convinced that we ought to be able to accomplish in six years, at most in seven, what we are now doing, as a rule, in eight. I commend to those of you who are interested in following up the details of this matter the report of the superintendent of schools of the city of Cambridge, Mass., where it is shown, after carrying the statistics over a period of seven years, that those students who complete the elementary-school course in the shortest time complete the high-school course with the greatest credit; those who complete the elementary-school course in the intermediate time complete the high-school course with somewhat less credit; and those who complete the elementary-school course in the normal time complete the high school with the lowest degree of credit. This is an actual experiment, worked out in a community of about one hundred thousand souls, and it throws light on just the point which I am making.

I am not going to detain you with a discussion of this problem, so far as it concerns the college, farther than to say that we are faced there by practically the same conditions. The trouble in the colleges is not, as has sometimes been thought, too much scholarship; it is lack of appropriate scholarship and lack of teaching spirit that waste the time there. I am sure that time can be saved in the college course, and that time must and will be saved in the very near future. When this happens, and when the work of the upper elementary grades is properly adjusted, we shall have accomplished two important things:

First, we shall have enriched the life and opportunity of the hundreds of thousands of children who must get all of their education from the elementary-school course; and we shall have decreased, perhaps by 10 per cent., the length of time allotted to the task of getting ready for the work of professional life or for the highly specialized callings which depend upon a college education as preliminary training.

This, then, is my view of waste in education as I see it, and these are the rough and brief suggestions which I make for its removal.

Let me now pass to another matter not at all related to that of which I have spoken, one about which I know there is great difference of opinion. It is partly for that reason that I propose to speak of it with entire frankness.

I want to call attention to a phenomenon which is so universal that we do not notice it—paradoxical though that sounds—but which, if it is permitted to continue, will one day produce most startling results in our life and civilization.

I refer to the facts that owing to a series of causes, operating over a considerable period of years, knowledge of the English Bible is passing out of the life of the rising generation, and that with this knowledge of the Bible there is fast disappearing any acquaintance with the religious element which has shaped our civilization from the beginning.

Not long ago my friend, President Thwing of Western Reserve University, printed in the *Century Magazine* the

results of an ingenious inquiry on this subject, which he carried on among college students. His purpose was not to find out what they knew about theology or what they believed about religion. His purpose was to find out what they knew about the greatest work of English literature. Those of you who have read that paper will remember the astounding results that his inquiry revealed.

In what I am going to say about the English Bible I want to make myself clearly understood. I want to make this fundamental distinction clear: I am not now talking about instruction in religion, important as many conceive that to be. I am not talking now about instruction in theology, important as some feel that to be. I am merely laying down this thesis: the neglect of the English Bible incapacitates the rising generation to read and appreciate the masterpieces of English literature, from Chaucer to Browning, and it strikes out of their consciousness one element, and for centuries the controlling element, in the production of your civilization and mine. I hold this to be true, even if there were not one person living in the United States who subscribed to a single article of any Christian creed. I am speaking now about literature and life, not about religion or theology.

I hold in my hand an edition of Milton's *Paradise Lost*, edited and annotated by a member of this Association. I want to read in this presence a few of the opening lines and tell you what happened when I read them in another presence not so long ago:

Of Man's first disobedience and the fruit
Of that forbidden tree, whose mortal taste
Brought death into the world and all our woe,
With loss of Eden, till one greater Man
Restore us and regain the blissful seat,
Sing heav'nly Muse, that on the secret top
Of Oreb, or of Sinai, didst inspire
That shepherd, who first taught the chosen seed,
In the beginning how the heav'ns and earth
Rose out of Chaos; or if Sion hill
Delight thee more, and Siloa's brook that flowed
Fast by the oracle of God; thence

Invoke thy aid to my advent'rous song,
That with no middle flight intends to soar
Above the Aonian mount, while it pursues
Things unattempted yet in prose or rhyme.

I read these lines to a company of college students, students who came from cultivated homes, who had enjoyed the advantages of a liberal training, and in that company of students there was not one who could make sense out of any line but the last, "Things unattempted yet in prose or rhyme"; I submit that the same is probably true of a majority of this audience.

Teachers all over this land are trying to teach Chaucer and Spenser and Shakespeare, Tennyson and Browning. How are they to understand men who refer to the Bible, that veritable treasure-house of literature, on every page, if they cannot take children to the source from which the supply is drawn? How are they to discuss and interpret the style of Ruskin, of Carlyle, of Emerson? How are they to teach the history of the heroes of our own independence, many of whom were religious in every fiber of their being, and whose work will continue to bear the stamp put upon it at the beginning, utterly regardless of what has become of religious faith in the interval? How is one to teach the truth as history reveals it, unless he teaches the whole truth? And yet, see what has happened: The quarreling of religious sects, of churches, each claiming this book for its own and denying the truth of what other persons find in it, has brought about a state of affairs in which the English Bible, a fountain of English literature, has been practically stricken from the reading of a large proportion of the American people.

Some years ago I was present in the city of Jerusalem at the extraordinary celebration of Easter day in the calendar of the Greek Church. There were gathered in the Church of the Holy Sepulcher representatives of Christian communions from beyond the Ural mountains, from the far regions of Abyssinia, Copts from Africa, together with representatives of the nations of western Europe. When at high noon the supreme moment came, the visitors were treated to this shameful spectacle:

Representatives, many of them clergy and high officials, of churches calling themselves Christian, were engaged in physical struggle for place that they might see, and were held in place and kept from assaulting each other by the sneering Mohammedan soldiery. Have you ever thought of the significance of a sight like that? Mohammedan soldiers, despised Turks, with cynical sneers on every face, held these devoted Christians from tearing each others' eyes out on the most sacred spot in Jerusalem. It is just this sort of thing that we are reproducing on a small scale in our bitter sectarian controversies over the interpretation of the Bible.

I contend that we are not only on the point of impoverishing life and literature by the neglect of the English Bible, but that we have already impoverished life and literature. I am not dealing with a problem that lies in the future, I am speaking of a condition which is at hand. We are impoverishing life and literature by striking out of our life and our reading one great monument of our literature, the source from which much of what is best in later centuries is drawn, the inspiration upon which the best English style has been built.

My own feeling is that what has come to pass can only be described by one word, shameful! I regard it as shameful that we have permitted, blindly no doubt, this tremendous sacrifice of literature and life and knowledge because we cannot agree upon questions of religious and theological interpretation. Why must we wait for agreement in matters of exegesis before we study matters of history and literature? Why should we not go back to a study of the source from which much of our noble English speech has come? More than that. How do you propose to teach American history without teaching the pupil who sits in front of you the controlling motive that drove the pilgrims to the New England shore? How are you going to explain that migration unless you teach the cause from which it sprang? How are you going to teach the history of Europe? How are you going to teach anything that has happened since the breakup of the Roman empire without teaching that the

controlling element in most of it was the sum total of the conceptions and feelings which we sum up under the name of Christianity?

One does not need to be a Christian to live in a Christian civilization. He lives in it whether he will or no. We are face to face with a series of facts which have been in process for nearly two thousand years, and this applies as well to the non-Christian as to the Christian. The non-Christian needs to read this literature, because he wants to understand it.

My contention is that we have made it impossible for the pupil to understand history and literature as they really are, because we have eliminated from his reading and study that which has been from a very early period a controlling force in both.

We study the religious books of other peoples, and hardly know our own. We do not study our own because we do not agree about the theological interpretation of them. We study the religious books of other peoples because we do not feel a direct personal interest in the theological interpretation of them, and the result is that we are to-day training more pupils to understand the elements that make up the life of ancient Rome than we are training to understand the life of our twentieth-century civilization.

I forbear to dwell longer upon this subject. It interests me exceedingly, but I have no reason to assume that it is as interesting to others.

I want once more to make it perfectly clear that I am not talking about religious teaching in school; that I am not talking about theological influence in education; but that I am only protesting against sacrificing a knowledge of our civilization to theological differences. I beg that I may be understood distinctly on this point.

I know that the supreme court of the state of Wisconsin has held the Bible to be a sectarian book. I know that the state statute-books are full of laws prohibiting the reading of the Bible in the school. My view is that this is wrong. I am not



WILLARD HUMPHREYS

in the least concerned in disputing that it has been done, but I think the time has come for us to regard it as a pressing problem to begin to get it undone.

As I said at the outset, I have selected these two subjects to speak of here in your presence, not because you will all agree with me that they are most important or most pressing, but because I think they are very important and very pressing, and because I know there is a sharp difference of opinion about both of them. I am very much more interested in discussing things about which there is a sharp difference of opinion, and where there is a fair chance for open debate and controversy, than in talking over the old truisms upon which all agree. It is in that spirit that I have ventured to discuss these two problems, (1) waste in our educational system, and (2) the situation presented by the lack of knowledge of the English Bible as a work of literature, the source of knowledge of a controlling element in our historic civilization.

WILLARD HUMPHREYS

WILLARD HUMPHREYS, a member of the class of 1888 in Columbia College, died at his home in Princeton, N. J., on Friday, September 26, 1902.

Born in Brooklyn on June 15, 1867, he received his early education at the Brooklyn Polytechnic and the Gymnasium of Hanover, Germany. In 1884 he entered Columbia and four years later graduated third in his class. The following autumn he entered the Columbia Law School and also began the study of medicine at the New York University Medical School. In 1889 he received the degree of A.M. for work done in the School of Political Science and was appointed Seligman Prize Fellow in Political Science for the ensuing year. The winter of 1889-1890 was a busy one and admirably illustrated the man's versatility and his capacity for work. He not only carried his studies in law, political science and medicine to a suc-

cessful conclusion, receiving in the spring of 1890 the degrees of LL.B. and Ph.D. from Columbia, and from New York University that of M.D., but he also at the same time acted as editor of the *Columbia Law Times*, secretary of the Medico-Legal Society and associate editor of the *Medico-Legal Journal*. After a year spent as a private teacher he entered the offices of the New York Title Guarantee and Trust Company, but a short experience convinced him that, as a lawyer, he could not hope for the leisure to pursue those literary studies and that broad culture which to him were of greater importance than any material advantages. He accordingly accepted a call to Princeton University as Instructor in Latin and entered upon his new duties in the autumn of 1892. His success as a teacher was instant and marked, and to this fact probably, even more than to his known acquaintance with the German language and literature, he owed his appointment as Assistant Professor of German, when in 1894 a vacancy occurred in that department. Three years later, in 1897, he was appointed Professor of the German Language and Literature, the position which he filled at the time of his death.

"In his college work," one of his colleagues writes me, "he was especially noteworthy as an able teacher and a valued administrative officer. His thought was always clean-cut and direct, and his example and influence tended to sharpen and clarify the minds of his pupils. His broad training and his familiarity with classical, as well as German literature, enabled him to arouse a keen appreciation of the German masterpieces. His naturally acute mind, further disciplined by his legal studies, worked always for accuracy and system; and important committee work—matters of administration and organization—was assigned to him because it was sure to be capably and efficiently done."

In addition to a clear insight and a keen critical judgment he possessed in a marked degree the power of concise, accurate and logical thought and the ability to apprehend intuitively in any subject that which was important and to disregard unes-

sential details. Averse to publicity of any kind he published little, but found the reward of his labors in the warm interest of his scholars, the approval of his family and his friends, and his own consciousness of work well done. Yet his sphere was not a narrow one, for throughout his residence in Princeton he was an active worker in the local Episcopal church and, as Vice-President of the Young Men's Guild, was untiring in his efforts for the welfare and the instruction of the young men of the church. The salient features of his character were his absolute frankness and openness, his abhorrence of all sham and pretense and the evenness of his disposition. He was not one to give his friendship lightly; but, once he became your friend, you could always rely upon him and, whether you met him daily or but once a year, you could rest assured of finding him ever the same. A loyal friend, an affectionate son and a devoted husband, he was a man for whom those who knew him best will mourn most.

CLARENCE H. YOUNG

OGDEN N. ROOD

AS an incident of the Civil War, the professorship of physics in Columbia College was vacated in the memorable summer of 1863. On the re-assembling of the College in the fall, two candidates, each of whom had many qualifications, were presented for the office—Frederick A. P. Barnard and Ogden Nicholas Rood.

Barnard had been graduated at Yale College in 1828, had had many years' experience in educational matters, and had gained an enviable scientific reputation. A romantic interest attached itself to him at that time. When the war broke out he was Chancellor of the University of Mississippi. He was strongly opposed to the secession of the southern states and, being obliged to give up the chancellorship, made his way, with considerable difficulty and some peril, to the North. On arriving in Washington he accepted, while awaiting an oppor-

tunity more worthy of him, an appointment in the office of the United States Coast and Geodetic Survey. Rood was twenty-two years his junior, had been graduated at Princeton in 1852, had subsequently passed some productive years of study in Germany, at Berlin and Munich, had had a brief, but informing, experience as professor in an ephemeral institution styled the University of Troy, and had published a number of scientific papers which showed the quality of his mind and training and the way in which his genius would doubtless find expression. He was, therefore, well, if not widely, known as a young man of ability and promise in scientific research and as a teacher of science.

In the course of the canvass, the Trustees of the College became well acquainted with, and much impressed by, the unusual merits of each candidate: they were fortunate enough to secure the services of both of them. Rood was chosen Professor of Physics and began his duties in February, 1864. A few months later, on the resignation of the presidency by Charles King, Barnard was elected President and assumed charge at Commencement in 1864. These elections marked an epoch in the history of the College. The great educational development, particularly in science, which soon thereafter began, gathered force with every successive year and, in a third of a century, transformed Columbia into a university, is known of all men; to it Professor Rood was an important contributor and for it he deserves his full share of credit.

Interest in scientific research and an appreciation of the value of scientific method were not at that time, nearly forty years ago, widely diffused. It was not so singular as the light of the present day would seem to make it, that scientific opportunity at Columbia was then very limited and that the department of physics was meagerly furnished and had little influence or distinction. There were very few appliances for illustrative experiment and practically none at all for research. There was, in fact, scarcely any apparatus worthy of the name—three hundred dollars would have been a liberal price for it.

A department of physics, in the proper sense, had, therefore, to be created; and to make this practicable, its value, educational and other, had to be generally shown. This task Rood cheerfully assumed with modesty and with confidence. He was engrossed in his subject and devoted to its improvement and its exposition. He seemed to be unconscious of any particular difficulties in his way—he met and overcame them as they appeared—and was wholly forgetful of himself. His picturesque appearance and unique personality attracted the students; the clarity of his lectures and the elegance of his experiments, by means of apparatus largely planned and constructed by himself, interested them. Innumerable anecdotes of his manner and his methods are told by former students, all of whom respected and admired him, and many of whom had a great affection for him. With him, it was often the unexpected that happened. One such story is here given as related by a member of a class that was graduated from the School of Mines nearly twenty years ago:

“At the time I entered the School, no chemistry was required to get in, although for me a great deal was required to get out. I had never opened a text-book on chemistry, but I soon found that most of my classmates had done so. ‘Will Mr. S. recite, please.’ Hardly above a whisper it came.

“I stepped down, walked around the long desk and stopped directly in front of him.

“‘Mr. S., what is the composition of water?’ There I was, and I knew myself a dolt. I had no more idea of the composition of water at that time than I have now of the composition of—almost anything else. So I answered promptly and frankly: ‘I don’t know, sir.’

“At this reply there was a fluttering titter among the class and a general shuffling of feet on the floor. Professor Rood’s face never changed a line.

“‘Did you ever hear of hydrogen, Mr. S.?’ quietly, he asked.

“‘Yes, sir.’

“‘Did you ever hear of oxygen?’ he added.

“‘Yes, sir,’ I replied.

“‘Do you know what the symbol H_2O stands for?’

“‘No, sir,’ said I; ‘I haven’t an idea.’

“At this admission there was a general outbreak of noise in the class. Not a sign of annoyance in Professor Rood’s face, though. With a pleasant bow, he said, ‘That will do, Mr. S.’

“The noise continued until after I was seated. Then Professor Rood slowly arose, faced the class, and the disorder ceased.

“‘Gentlemen,’ said he (I sometimes doubt if he really thought us so), ‘I called upon Mr. S. to answer some questions, and I was able to find out at once and quickly that he did not know their answers. Some students will waste half the hour in telling me that they do not know a thing. Mr. S. wasted no time. I shall give him a mark of ten.’

“That is my story. It was my first score in physics, and I have always been proud of it, even though it was won on such an exhibition of ignorance. Whether Professor Rood would have done this same thing again, I do not know; to me it has always seemed to be very characteristic of him and his ways.”

Of his general manner in lecturing, a former student, now himself of repute as an investigator and lecturer in physics, writes that the character of the instruction given in his time, twenty-five years ago, was “always very clear, very deliberate in its presentation, even repeating the same idea a second time in the same or a different form, giving the student ample time to revolve the matter in his mind and make it entirely his own. There was a peculiarity in his lectures which distinguished them from those of most lecturers. Apparently every sentence was so carefully thought out and clearly and concisely delivered, that it represented the best way of expressing the particular idea, so that even after twenty years of work in the subject a large part of the fundamental material exists in my recollection in exactly the form in which it was presented by him more than twenty years ago. Few people appreciated

the value of his method upon listening to him for the first time, but all were bound to admit it when they realized the way in which the information remained available in their memory."

In addition to his skill as an investigator and an expositor, he had the power of organization and development and no little prevision. The equipment of his department, which was practically nothing in 1864, was gradually improved and increased and is now valued at about twenty thousand dollars: the two or three dismal and unattractive rooms of the earlier time have given place to Fayerweather Hall, a large part of which is now occupied, and the whole of which will ultimately be occupied, by the Department of Physics for lecture rooms and laboratories: a staff consisting of the professor himself, with a laboratory assistant, has been replaced by one of fourteen accomplished members. As to his relations with his staff, one of them writes: "As head of a department he was always most considerate of his subordinates, and never lost an opportunity of advancing them either in the Department or by obtaining positions elsewhere. On all occasions he was ever ready with pleasant compliments for his assistants, making it almost appear that the success of the Department was really due to the inferiors rather than to his own direction. The one watchword that seemed to guide him in his instruction was that the material presented should not be too advanced for the listener. He maintained that it was much less dangerous to tell a student something concerning which he knew something, than to tell him something concerning which he knew nothing and which he could not understand from ignorance of the preliminary knowledge. Many times in the Department when it became necessary to reprove or correct one of the subordinate instructors, he has asked me to speak to the man in question because he felt that it would be less severe and not so drastic, as if the head of the Department found it necessary to administer the reproof. Thus in every way the sympathy and tenderness of his heart appeared as an indispensable companion to his zeal for investigation and research for truth."

When Professor Rood was engaged upon an investigation, time and personal comfort had no significance to him: he worked in his laboratory hours and hours at a time, often through a great part of the night, with little thought of eating or sleeping. His contributions to knowledge in papers read before the National Academy of Sciences, of which he early became a member, and published in the *American Journal of Science*, attracted marked attention; they gave him distinction for fertility of resource in making refined, delicate and well-selected experiments, for accuracy of observation, for definiteness and reserve in statement. His scientific papers, over seventy in number, while ranging generally over the domain of physics, are more particularly concerned with light, the phenomena of color and vision, and, latterly, with researches in electricity. Scientific authority will put a due estimate upon them and assign their author his true place in the history of physics.

His best known work, "Modern Chromatics," published in 1879, is a classic. In it, he combined an exact knowledge of the science of color with the keen perception and appreciation of the born artist, which, among other things, he was. Many of the most distinguished colorists in this country and elsewhere have testified their appreciation of it and their very great obligation to the author. It was translated into French and German, and has become the standard and text-book for artists generally.

His interest in art began at an early period. When he was a student in Munich under Liebig he became acquainted with some of the leading German painters, such as Melchior, many of whose works he brought home with him. He devoted much attention at that time to serious art study. On his various student excursions, he made water-color sketches of French and German landscape. A few years later, he put himself in correspondence with Ruskin, in the course of which Ruskin sent him eight of his water colors and pastels. He never lost his interest in art or ceased the practice of it. When visiting

his sister at Peace Dale, Rhode Island, he made sketches and water-color drawings of the country about Narragansett; when at his cottage in Stockbridge, Massachusetts, where he spent his summer vacations with his family for the past thirty years, he made sketches and studies of Berkshire scenery. Many of these latter were, at various times, shown at exhibitions of the Water-Color Society, and many more were given to friends. He loved Nature and had no greater pleasure than in recording her various moods and expressions as he saw and understood them. Turner was his great model and Turner's work influenced him more than that of any other artist. He was not an impressionist in theory or practice; but in consequence of a remark made by Claude Monet, in writing of *Modern Chromatics*, that "the work had been of invaluable assistance to him," and of similar remarks by other artists of the same school, it was averred that the modern impressionist movement received support and impetus from Rood's theory of color as set forth in that work—a responsibility which Rood himself declined.

About fifteen years ago he became interested in antique coins and gems, and, after his manner with matters which engaged his "leisure," as with the one which engaged his "busy," moments, he studied them carefully and exhaustively. He became an acknowledged expert in them and made a modest collection. His satisfaction in getting a new idea, in making a discovery, or in coming into possession of beautiful objects, was never complete until he had shared his possession, whatever it might be, with his friends. His experiments in physics and their results, he must communicate, in private conversation, in public discussion or in printed papers; so with his sketches and water colors, they must be shown and many of them given away; so also his collection of antiques must be shared with those whom he valued—and to them he gave electrotype impressions of such as he had. In his new "recreation," he conferred often with his friend and colleague, the late Professor Merriam, who became before his death, which

was all too early, one of the most distinguished archæologists of his day. Merriam often spoke of his obligations to Rood, and was so impressed with the latter's knowledge of the subject that he induced him to deliver a lecture at the Metropolitan Museum of Art on Ancient Gems. In this lecture, Rood showed upon a screen pictures of some of the finest of the Mycenæan gems in the Museum of Athens, casts and electro-types of some seventy of which he had in his collection. That he might do this, in an effective way, he made, by a process of his own, a wax extensible without fracture and not affected by the temperature, and gave it a rich amber tint. He then pressed the gems that he wished to exhibit on the wax spread thin upon glass slides, and so obtained very fine impressions. When these were thrown upon the screen, the pictures were clearly defined in every detail and beautiful in color. Not content with this, he set up and operated in presence of the audience a simple hand-machine which he had devised and by which, or something very like it, the gems might have been made and were probably made. The lecture was most unusual and attractive, in matter and in manner, and impressed every one who heard it with the exact knowledge, the power of precise expression and the marvelous skill of the lecturer. Some time subsequently he used the machine, which he had constructed and shown, to make for himself an "antique" cylinder, not a copy of any that was known but a "newly discovered" one. He sent this for examination to a society of archæologists through its president, whom he informed that it was a modern Rood "antique." The president wrote to him later that the cylinder was so well made as likely to deceive the very elect and that should he, Rood, at any time grow weary of the science of physics, reputation and fortune awaited him as a maker of "ancient" cylinders and gems.

Professor Rood spent the greater part of his time in his laboratory and in private reading and study. In his walks abroad, and to the casual observer, he had the abstracted air of a student and a recluse. He paid little attention to dress

and personal adornment; but without any adventitious aid, his appearance was striking and drew attention to him as a man of mark. He was absolutely truthful himself, and despised any lack of truthfulness in others; he had the courage of his convictions; he was frank, very frank sometimes, in expressing his opinion of men and things. He made few advances in the way of acquaintance or friendship and was apt to receive them with reserve. He had warm and devoted friends, and he had acquaintances who had no personal attachment to him; but every one who knew him, or knew of him, respected and admired his rugged character, his scientific attainments and accomplishments and his versatility. The indifference and cynicism sometimes imputed to him were but superficial, assumed, as many who knew him well thought, to cover a very warm and sympathetic nature. A friend in need never appealed to him in vain. Distress in any one, when brought to his attention, touched his heart and opened his hand. He despised shams of every kind, and, when opportunity offered, exposed them relentlessly. Any claim to superiority had to be established; he took nothing in that regard for granted or at second hand. His character was decided, his likes and dislikes were pronounced and, for the most part, unchanged and unchangeable. The men with whom he was thrown, particularly those with whom he was in any way associated, were either "sheep" or "goats," and rarely did any one ever pass from the fold of one to that of the other. He always carried with him, he humorously said, a stultometer, or "foolometer" as he preferred to call it; with this he measured the people who came under his observation and made his grand division of them. He was very fond of children and they reciprocated his affection; they were strongly attracted to him and he never disappointed them, having always a unique story or amusing incident to tell them or a little trick of some sort that he had contrived for their entertainment. During all his life he was a great walker and lived as much as he could out of doors. In the winter he often skated on the lake in Central Park and did

it well, as he did everything that he cared for and undertook; in the summer, at Stockbridge, for the last six or seven years of his life, he rode a bicycle, and frequently rode thirty miles in an afternoon. He explored the Berkshires in every direction, making friends of the plain country people and, as was his wont, especially of the little children.

He was a successful professor of a recondite subject, a devoted and valued officer of the University with which he was long connected, a fruitful scientific investigator, a master of the theory of color and no mean artist, with genius in his head and in his hands, with a wealth of accurate and most interesting information on a great variety of topics, a delightful conversationalist, a loyal and outspoken friend—possibly “lofty and sour to them that loved him not,” but certainly, “to those men that sought him, sweet as summer.”

This inadequate notice of Professor Rood may be concluded by two brief extracts from his inaugural address as Professor of Chemistry at the University of Troy, delivered July 20, 1859, wherein is indicated, among other things, the serious and high purpose that actuated him in his long and useful career. “The mere desire of wealth, though it may influence many to touch lightly on the surface of these studies [the physical sciences], still is not a motive of sufficient strength to enable one to toil a life time, content with such rewards merely as are found in the pursuit itself. This calls for a more powerful and nobler motive—and it is found in the intense desire to solve some of the profound mysteries with which we are surrounded, in the longing to obtain some glimpses into the inner world, into the secret laboratory of nature.” He spoke then at some length, and with illustrations, of the practical value of scientific study, and continued: “And now it would be proper, having indicated these lesser advantages, to speak of the nobler end of such study, of its beautiful and spiritual purpose; to speak of Natural Philosophy as a revelation from ‘The great God, who maketh and doeth all things well.’ But if you have not listened to his

voice, speaking in his yellow sunbeams; in his banded rainbows and purple sunsets; in the violet flash of his lightning, and in the war of his tempests; or in his white crystalline snow with its blue shadows, and in his dark rivers congealed into transparent highways, solid as the rock, neither would you meditate on any crude thoughts that I might suggest."

J. H. VAN AMRINGE

The funeral services of Professor Rood were conducted in Earl Hall, on Friday, November 14, by the Chaplain of the University, Dr. Geo. R. Van DeWater, and the Rev. Dr. Marvin R. Vincent, of Union Theological Seminary, a trustee of Columbia University and a friend, for many years, of Professor Rood. The services were simple, as befitted the memory of one who disliked pomp and display, but they were impressive and appropriate. The exercises opened with versicles and psalms read by Dr. Vincent, followed by the lesson from First Corinthians xv, 20-58. "Nearer my God to Thee" was sung by the whole congregation, and Dr. Vincent then pronounced the admirable and sympathetic address printed on a following page. Prayers, a hymn and the benediction concluded the services, and the casket was borne to the hearse before the company of Trustees, officers and instructors of the University gathered on the terrace in front of the Library. The esteem and affectionate regard of the student-body were attested by the attendance at Earl Hall, which crowded the large auditorium and overflowed into lobby and stairs. The honorary pall-bearers were the officers of the Department of Physics.

The address of Dr. Vincent was in these words:

I am here this morning to say a few words about my old friend and colleague, Professor Ogden Nicholas Rood.

My memory runs back over a space of forty-four years, when he and I began our professional life together in a new institution in the city of Troy. It was, I think, in this or the preceding month that he arrived from Germany, bringing with

him his newly-wedded wife. The college, which assumed the high-sounding title of "The Troy University," was in its first, crude stage, lodged in a huge, pretentious, and uncomfortable building, and almost entirely devoid of even the ordinary appliances of a common school. I shall never forget his unconcealed and vigorously-expressed disgust, when, fresh from the plethoric libraries and well-appointed laboratories of a German university, he found himself, with the title of Professor of Chemistry, in a so-called library, where four or five hundred volumes, chiefly of classical authors, were displayed on a dreary expanse of shelving; in an ill-lighted lecture-room with a few bottles of chemicals, and with a handful of students, half-trained in country academies, and, the most of them, without any interest whatever in what he was appointed to teach them.

But even under these depressing conditions, his native energy, versatility, and fertility of resource displayed themselves. The apparatus which the poverty-stricken college could not furnish him, he manufactured with his own hands, enough at least to meet the very limited requirements. To those students who cared nothing for chemistry or physics, he was simply and serenely indifferent. He was a conscientious teacher, and any one who desired to learn, might learn; but very few desired to learn, and he quietly filled his class-register with zeros, which marked the numerous pitiable displays in his lecture-room. But when he did, now and then, meet with a student who showed an interest in his teaching, there were no lengths to which he would not go, to instruct, encourage, and advance him. He would devote himself to him in hours and out of hours. He would take him to his private room, and lecture to him, and experiment with him, and lend him books, and all this, week after week, as though he had no object in his professional life beyond the proficiency of that particular student.

Separated in some degree, by our situation, from the social life of the city, the members of the faculty were thrown very much upon each other, and our relations were very intimate.

Naturally inclined to solitude, he proved himself, nevertheless, a most genial, stimulating, cheerful, and appreciative companion. No one would have thought of setting him down as a recluse. He was always ready to exchange a jest, and to see the humorous side of a thing; and yet one was always conscious of an undercurrent of serious purpose. Into the narrow life of the infant college he threw himself with enthusiasm. He treated the various annoyances, inconveniences, and hardships with a kind of grim humor and tolerance, and he made the best of everything, and extracted from his experience a great deal of real enjoyment and solid achievement.

Apparently one of the idlest and most indifferent of men at times, he was really one of the most busy and intent of men at all times. Often, when he appeared to be merely amusing himself, he was most hard at work in some definite direction. For months at a time he would spend many hours of each day with his rifle, at a rough shooting-gallery among the hills back of the college, strolling leisurely homeward toward sundown with his paper targets in his hand; but by and by appeared a careful treatise on the American rifle. On a ramble, or while engaged with any piece of mechanical work, his eyes were continually busy noting phenomena, and divining new laws and principles; and the results of these observations were continually coming to light in papers in the *American Journal of Science and Arts*. Now he was experimenting with the stauroscope: again, while grinding a microscopic slide, he was noting the muscular contraction induced by contact with vibrating bodies, and comparing the symptoms and sensations produced by electricity and by mechanical vibration. Then his attention was directed at the phenomena of circulation in the eye. In his reading about Australia, the boomerang awakened his curiosity; and he set himself to study the principle of that barbarous instrument, and might often be seen on the college campus, throwing the models he had prepared, and studying their curves as they flew outward and returned. During the whole time of his residence in Troy he was studying the infant

science of photography, wandering over the hills with his camera, photographing all sorts of objects, experimenting on all sorts of processes, and recording and tabulating innumerable data.

And when he had found something, his instinct was to go and tell it. Without any such intention, he managed to draw us all into the current of his own interest. His enthusiasm was contagious, even to those who possessed little scientific knowledge. The ardor of a true huntsman is kindled by companionship. His life was one perpetual chase of the facts and laws of the physical universe: and though his zeal would have sustained him in a lonely pursuit, his pleasure was greatly enhanced by the intelligent sympathy of another. He liked to awaken the interest of even a mere boy in what he was doing. One day, some four years ago, I went to see him in his laboratory, having with me a lad of sixteen who was preparing to enter the School of Mines. He kept us there for something like two hours, showing the boy all kinds of wonders in the laboratory, especially the operation of the Röntgen rays, on which he was then experimenting.

His zeal in the pursuit of physical science was intense and consuming, and never slackened while he lived. The more closely Nature guarded a secret, the more obstinately was he bent on discovering the master-key. He was impatient of everything superficial. He desired, and was determined to know not only facts, but laws; not only laws, but ultimate principles. Even at that early period of his career, he was *en rapport* with various notable specialists and high authorities, and was occasionally visited by them at Troy.

He remained there, however, barely four years. The institution broke up in 1862, and two years later he was elected to the chair of Physics in Columbia, and has filled it up to the hour of his death on last Wednesday—a period of thirty-eight years. Had he lived, he would have been honorably retired, at his own request, at the close of the present academic year.

That he richly fulfilled the promise of his early professional life, I suppose that no one will deny. His term of service has marked an interesting and significant period in the history of Columbia. I may perhaps be excused for alluding to my personal recollections of a time only ten years before the beginning of his Columbia professorship, when the scientific department of our College was in a condition truly pitiable, and when Professor James Renwick, with the most meager appliances, was charged with the burden of instruction in everything which pertained to natural science—physics, chemistry, mechanics, mineralogy, and all the rest. It is true that the great scientific wave had not yet rolled in with the vast volume and power which have marked it in later years; but Columbia, so far as natural science was concerned, was far below the highest standard of even that day. A better time began to dawn three years later, and seven years later, Doctor Barnard began the work which has given him an enduring place in the history of our University. Professor Rood entered upon his professorship in the same year in which Doctor Barnard assumed the presidency, so that, practically, he has been identified with the entire development of our scientific schools.

What that development has been, it is not for me to indicate, as it is not for me, in this presence, to formulate any estimate of Professor Rood's place and work in the scientific world. To this I am not competent. That his place has been a high and honorable one, would be attested, if by nothing else, by the fact that he has occupied one of the most important chairs in this University for nearly forty years.

His unique and sharply accentuated personality, so utterly unconventional, was familiar to you all, as was his love, not only for all that is truly scientific, but for all that is truly beautiful in art.

We know that his life-work must needs have come, substantially, to an end, when he had passed the line of threescore-and-ten; and that it must be taken up by younger and stronger

men: none the less there is a sadness which we all feel to-day, in parting with an old friend and fellow-worker, and with a familiar face. He will remain, a standing lesson and example to a younger generation of the truth that any success which deserves that name, comes only through hard, patient, thorough, and self-sacrificing toil.

EDITORIAL COMMENT

The first Annual Report of President Butler to the Trustees was expected to be a strong and able presentation of the conditions of the University and of the problems which the University is facing and must solve in the near future. The Report was all this, but it was also much more than this; for it attacked these problems and the conditions from which they have emerged with a boldness of grasp and clearness of reasoning in most refreshing contrast to the timid approaches and temporizing and opportunist solutions which have been too common in dealing with them in the past and elsewhere. In the earlier pages of this issue an abstract is presented of the portions of the Report devoted to the educational problem; this occupies the largest number of pages and has aroused the most widespread discussion. But the place of first importance in its relation to the present needs of the University has been given to the financial question, as the one most insistently pressing for immediate action.

The financial problem demands this immediate consideration for the simple reason that until the University's financial needs are met its educational progress is absolutely blocked.

Ten Million Dollars Needed No matter how overcrowded its lecture rooms, no matter how great its needs or its opportunities in other directions, no matter what the demand upon it for educational reorganization or expansion, the University can do no more until it has been given the means to do it with. The superstition that Columbia has all the money it requires is most effectually refuted, and let us hope and

pray, exorcised by the President's statement of her actual needs, so clearly and succinctly set forth as to carry conviction to the mind of the most incredulous. The most immediate and pressing of these needs are:

1. To pay the existing debt.....	\$3,000,000
2. To accept the option to purchase the property immediately south of the present site on Morningside Heights, before July 1, 1903	2,000,000
3. To build and equip a College Hall.....	500,000
4. To complete and equip University Hall....	1,000,000
5. To build and equip a Law School Building.	400,000
6. To build and equip a building to give accommodations to departments now overcrowded or temporarily assigned to the Library	400,000
7. For general University purposes, including provision for the most pressing needs of the Schools of Applied Science and of Medicine	2,700,000
	\$10,000,000

"Large as this sum is," says the President (and all who really know the University as it is to-day will bear witness to the truth of his assertion), "every dollar of it can be wisely, economically, and effectively used at once, for the purposes named. Nor does it by any means measure the extent of the University's need. I hope that in the near future we shall command the funds necessary to care fully for the work in Applied Science and in Medicine in the most efficient manner and to make proper provision for a Faculty of Fine Arts. The other buildings which have been mentioned—a chapel, dormitories, and an astronomical observatory—would be a still further charge. At present rates of interest, a capital sum of not less than \$5,000,000, over and above the \$10,000,000 named, would be needed in order to complete the University's equipment and to provide for its maintenance."

"To pay the indebtedness out of the present assets would mean the stopping of some part of the educational work now

in progress, and that, as everyone knows, would be a fatal blow at the University's reputation and effectiveness. For this reason the extinction of the debt must come, I think, through the generous assistance of those whose privilege it is to be able and willing to endow higher education in the United States.

"In my judgment, nothing is to be gained, and much may be lost, by failing to face the facts, and to ask the public to consider both the heavy burden of our debt and the great cost of the work which Columbia University has undertaken to do, and which it will and must do for the city and nation."

The Trustees have shown their entire concurrence in Dr. Butler's views by approving his Report, and by appointing a Committee consisting of the Finance Committee and the Treasurer of the corporation to aid him in carrying those views into effect.

A few years ago the mention of such a sum as that suggested by the President would have been regarded as an extravagance, and the securing of it, within any finite time, as an impossibility. But this is no longer the case if editorial comment in the metropolitan press and elsewhere can be accepted as an index. In all the numerous editorials which have recently discussed the subject, the demand has been recognized as entirely reasonable, and in many the belief has been expressed that it would be obtained. Such confidence is based upon the merit of the claim and the examples we have had in the last few years of liberality in giving. If one man can give ten million dollars for the support of a university or an institute, why should not ten men give a million apiece for a like purpose? What university can more justly claim such support or what constituency can so well afford to give it as the City of New York?

One result of the growth of the University has been an increase in the amount of administrative work to an extent which is realized by comparatively few except those upon whom its performance devolves, but which
Administrative Problems has, nevertheless, become a very serious burden upon the teaching staff. It is perfectly true, as the

President points out in his Report, that "more than one great teacher and investigator has been spoiled by this division of interest."

"It is in the University's interest that as little as possible of this administrative drudgery and clerical work be devolved upon the teaching force"; and the President, with his usual practical sagacity, proposes as a step towards such relief, that the Secretary's office shall take care of a portion of this "drudgery and clerical work." He contends that "the larger administrative posts should be held by men whose duties are largely, perhaps wholly, administrative and who either are, or may become, experts in that portion of the work of the University which is entrusted to their direct oversight and care."

The office of Dean, in particular, should be lightened of many of its present burdens. With regard to the importance of this office the President's views are stated as follows:

"We should look forward to the time when the several deans will be in effect presidents of their respective schools or faculties, and as such relieve the President absolutely from any direct contact with matters of detail. It is clear that Columbia University has already reached the point where the time and the thought of the President must be given wholly to the study and consideration of large questions of policy and to the relations of the University to the community. I think that the office of Dean will, and should, tend to become more and more important and to stand in increasingly close relations to the policy and the votes of the Trustees."

The last sentence seems to point to the fact that the greatly increased powers and responsibilities devolving upon the deans by reason of the growth of the several schools, both in numbers and expenditures, has placed these officers in a relation to the Trustees somewhat similar to that occupied by the President. Under the present statutes the deans are in effect the vice-presidents of the University, and as its chief executive officers they are responsible for carrying out the policy determined upon by the governing body. This being their principal obligation, it may be questioned whether they should not be appointed by the Trustees whom they represent in

their executive capacity rather than elected by the Faculties over which they merely preside. As constituting the "Cabinet" of the President the deans can relieve him of the great mass of detail and administrative work, and both experience and common sense recommend this division of labor as most consistent with good corporate management and as most likely to be conducive to the good government of the University.

The new year brings to Columbia University an unusual number of changes. Never before in the history of this institution have so many new names appeared upon the list of the staff of instructors. Deaths, resignations, promotions and new appointments have been very numerous, and many pages of the QUARTERLY have been devoted to reviews of the life and achievements of those who have thus passed off the stage of active work at Columbia during the year, and of many of those who have now made their first appearance upon it.

Of others whose appointment was announced too late for notice in the September number, and of whom the pressure of other matter forbids adequate notice in this one, brief sketches will appear in later issues, in connection with the departments to which they have come.

The opening weeks of the year have been made memorable in other ways also. The appearance of the President's Report, the warm and sometimes almost acrimonious discussions to which it has given rise, and the publication of his address upon Bible study in the schools at the Minneapolis meeting of the National Educational Association, have attracted public attention in an unusual degree, and throughout the whole country, to Columbia University and the forceful personality at its head. Other notable features of the opening year have been the definitive launching of the School of Architecture and Department of Music upon their new careers as independent departments of the University; the reception and luncheon to the Congress of Americanists on October 23; the celebration, by an exhibi-

tion and dinner at the Fine Arts building on 57th Street, of the "coming of age" of the School of Architecture and the completion of twenty-one years of service by Professor Ware, its organizer and head; the opening of the new Department of Chinese under Professor Hirth, and of the new course of public lectures on the Fine Arts on October 27; and the announcement of a large gift to Teachers College. All of these events are duly chronicled under their appropriate heads in the departmental reports and University notes.

THE UNIVERSITY

The University reopened on Monday, the sixth of October, with indications of increase in numbers in nearly every department. The new regulations concerning registration and enrolment resulted in great improvement in the promptness with which students fulfilled these requirements, and greatly facilitated the prompt and vigorous resumption of work in the class room. At the chapel exercises on the opening morning, which were held in the auditorium of Earl Hall and attended by an audience which packed the room to the doors and overflowed the whole building, President Butler addressed the students, extending to them a hearty welcome and then enlarging on their own personal responsibility for the results in life to be achieved upon the foundation of the university training. After noting that the present is never with us but always fleeing into the past, and that life is made up of memory and hope, he made eloquent reference to the great names and great history that belong to Columbia, and appealed to all to uplift and glorify the Columbia so honored and glorious in its past. "Columbia's conception of education," he continued, "is the broadest possible. It does not make of the period of studentship an intellectual treadmill, although its standards are high and rigidly adhered to. These walls are witness to our care for the religious and social life of those who come to study on these noble heights, and that field yonder (which we must soon call our own) testifies to

our care for outdoor exercise and manly sport. Growth, human growth, is what we aim to foster, and to that all that you see gathered about this stately pile is meant to minister.

"You come to the University at the very time when growth is most rapid. New knowledge, new appreciations, new resolves, crowd fast upon each other. The scene shifts rapidly, but not without meaning. Finally, as the period of university residence draws to a close, you begin to ask yourselves, 'What has it meant for me?' Answer this question fairly, and it will surprise you to see how largely you have made your own career here. . . . So I say to each of you, new and old members of the University alike, go at your year's work with a purpose. Let it be a purpose worthy of you, and bend everything to its accomplishment. . . . Do not let things happen; make them happen. At the year's end you will be happier than if the other course had been taken.

"I envy the student of to-day. Resources unknown a generation ago are spread out before him. Everything that man can devise and generous purposes provide is prepared for his comfort and his benefit. But is he made of the stuff that gave his father and his grandfather character and force? That he must answer for himself. I hope he is; I believe he is."

* * *

On the afternoon of Saturday, October 18, President Butler tendered a reception in Earl Hall to eight newly appointed professors and seven new adjunct professors of the University, the majority of whom were called from other institutions, though two or three of their number had previously been lecturers or instructors at Columbia. The reception was held in the large reception hall, while in the auditorium upstairs Mrs. Butler, assisted by other ladies of the University faculties, entertained the guests at an informal tea. The attendance was large and the opportunity for acquaintance between the new professors and those already in the service was highly appreciated and much enjoyed.

The newly appointed professors, in whose honor the reception was held, are as follows: Felix Adler, Ph.D., Professor of Social and Political Ethics; L. Emmet Holt, M.D., LL.D.,

Professor of Diseases of Children; Friedrich Hirth, Ph.D., Professor of Chinese, on the Dean Lung Foundation; Walter B. James, M.D., Professor of the Practice of Medicine; John Dyneley Prince, Ph.D., Professor of Semitic Languages; Julius Sachs, Ph.D., Professor of Secondary Education in Teachers College; Charles Thaddeus Terry, A.B., LL.B., Professor of Law; Frederick James Eugene Woodbridge, A.M., Professor of Philosophy; William Tenney Brewster, A.M., Adjunct Professor of English in Barnard College; William J. Gies, M.S., Ph.D., Adjunct Professor of Physiological Chemistry; Amadeus J. Grabau, S.D., Adjunct Professor of Palæontology; Charles Knapp, Ph.D., Adjunct Professor of Classical Philology in Barnard College; Henry L. Moore, Ph.D., Adjunct Professor of Political Economy; George C. D. Odell, Ph.D., Adjunct Professor of English; Henry Rogers Seager, Ph.D., Adjunct Professor of Political Economy.

On Thursday, October 23, the President, on behalf of the University, received the members of the Congress of Americanists and entertained them at luncheon, as is more fully stated below. On Monday, November 17, the retiring Ambassador of France, Mr. Jules Cambon, addressed the officers and students of the University in the auditorium of the Horace Mann School of Teachers College, in an eloquent speech which was received with applause. President Butler presided, and music was furnished by the Columbia University Orchestra.

* * *

A scientific gathering of more than ordinary interest to this country in general and to New York and Columbia in particular was the Thirteenth International Congress of Americanists which met in this city in October. The Congress, as at present constituted with its cosmopolitan representation, is the outgrowth of a small society formed in 1857 under the name, "La Société Américaine de France," by a number of gentlemen of that country who were especially interested in the pre-Columbian history of the two Americas. Flourishing beyond all expectations, the society called an International Congress of all interested in early American history to meet at Nancy, France, in 1875. Representatives from various for-

eign countries were present and the success of the new institution was such as to determine its perpetuation. Guided and controlled in its early years by the parent society, the Congress is now an independent organization, has widened its scope until it covers the entire field of American anthropology, and has won a distinguished reputation for the high quality of its proceedings.

The recent meeting was the first ever held in the United States, and New York is to be congratulated upon the enthusiasm and unanimity with which the invitation of President Morris K. Jesup, of the American Museum of Natural History, to the Twelfth Congress, then meeting in Paris in 1900, to hold its next session in the halls of the Museum was received and accepted.

Upon the assembling of the Congress in the Museum on October 20, Mr. Jesup was elected President and the Duc de Loubat Honorary President, while representatives of the Argentine Republic, France, Germany, Mexico, Sweden and the United States were upon the list of Vice-Presidents. The daily sessions were attended by large numbers and a long and varied program occupied the entire week.

Besides being represented in the Congress by a number of her officers, Columbia had the honor of formally entertaining its members at the University on Thursday, the 23d. President Butler received the visitors in the Trustees' Room and, after an inspection of the buildings and grounds, luncheon was served in University Hall, at which members of the Faculty acted as hosts.

Following the adjournment of the Congress on the 25th, the official representatives became the guests of the Pennsylvania Railroad, which placed a special train at their disposal for a week's trip to Philadelphia, Washington, Pittsburg and Chicago, at all of which points they were cordially welcomed and entertained. This trip afforded a fitting conclusion to what was probably the most successful meeting in the history of the organization.

* * *

A public meeting of the Academy of Political Science, held October 27, 1902, under the presidency of the Honorable Horace

White, was of an exceptionally interesting character. The chief paper of the evening was presented by Dr. Iyenaga, a Japanese professor, who took his Doctorate of Philosophy some years ago at the Johns Hopkins University. The subject of the paper was "The Existing Condition and Future Prospects of China." The author's presentation of the subject was in excellent English and involved an outline of a future policy that would be most consistent with a recognition of the new Japan as a world power. Dr. Iyenaga's conclusions were discussed, first, by Professor Hirth, our German-American head of the Chinese Department of Columbia University, and afterwards by Mr. John Foord, the Scottish-American Secretary of the Merchants' Association of New York. It had been hoped to introduce still another ethnic element into the debate through a further discussion by a prominent Chinese student of the University, but this gentleman unfortunately was unable to be present.

* * *

The measures initiated during the summer by Columbia University, for the establishment of international university fellowships in France and at Columbia, and referred to in the September *QUARTERLY*, have come to a successful issue through the arrangements effected by Professor Cohn with the French Minister of Education. In pursuance of these arrangements and of the action of the Trustees of Columbia University, M. A. François Monod, a graduate of the University of Paris, has been designated as the French Fellow at Columbia for the year 1902-1903, and Mr. F. E. Farrington, A.M., Columbia, 1902, goes to France as the Columbia Fellow for the same year. The American student is given the privilege of selecting the university in France which he shall attend, all the French universities being alike under governmental control. In following years there will be four such fellowships, two each in Columbia University and in the French universities.

* * *

In the June *QUARTERLY* mention was made of a proposed celebration of the twenty-first anniversary of the founding of the School of Architecture, by the former students of the school, both graduate and non-graduate, and of its postponement in consequence of Professor Ware's illness. His complete recovery and

his return to his duties in October made possible the realization of the plans for the celebration, which took place during the week beginning November 3. The whole function was devised and carried into execution by committees of former students of the School of Architecture under the chairmanship of Mr. H. F. Hornbostel, '91, Lecturer on Architectural Design, and consisted of a complimentary dinner in honor of Professor Ware's twenty-one years of service as the organizer and head of the school; the presentation to him of a testimonial from several hundred of his former students at Columbia; and an exhibition in the galleries of the Fine Arts Society on Fifty-seventh street, of the works of both graduate and undergraduate students, including a full display of the current work of the School itself. The whole celebration was carried out with marked success. The dinner, presided over by Mr. J. Monroe Hewlett, of the class of '90, was served in the Vanderbilt gallery, which was appropriately and effectively draped with the Columbia colors. Nearly two hundred graduates and non-graduates were gathered to do honor to their teacher, "guide, philosopher and friend" and to the school of which he was the creator; and the addresses made were felicitous in an eminent degree. The dinner was made the occasion of the presentation to Professor Ware of the testimonial of personal esteem to which reference has been made. This was in the form of a book, richly but soberly bound, consisting of thirty or forty sheets of vellum bearing the signatures of nearly four hundred former students, and prefaced by a beautifully-engrossed dedication freely rendering in English the words inscribed in Latin upon the diploma of Doctor of Laws conferred upon him by Harvard University in 1900:

"The creator of two serviceable schools of Architecture, the first at the Massachusetts Institute of Technology, the second at Columbia University in the City of New York; the Friend, Exemplar and Instructor of a generation of American Architects."

The address of Professor Ware, on receiving this testimonial, reviewed the ideals which had governed his labors since he had been called by the Trustees in 1881 to organize a department of architecture in the School of Mines of Columbia College (as the Faculty of Applied Science was then

called), and sketched the progress of architectural education from the days when he himself entered the studio of the late Richard M. Hunt as a student, with Mr. Geo. B. Post as one of his companions. The growth and final emancipation of the School of Architecture—the latter occurring most fittingly on its twenty-first birthday—were eloquently recounted with many delicately humorous touches. Professor Chandler followed in his characteristic vein, in an admirable tribute which elicited great applause, and Mr. Post made a strong appeal to the graduates to work for an adequate endowment for the school. Mr. H. R. Marshall made the concluding address, and the gathering “resolved itself into its social capacity” as the largest gathering of graduates and former students of the school that has yet been known. The whole membership of the first-graduated class, that of 1884, was present, and its record could hardly be surpassed. Three of its five members are professors of architecture—Mr. F. D. Sherman at Columbia, Mr. T. Nolan at the University of Pennsylvania, and Mr. A. C. Nye at Pratt Institute. The other two members constitute the widely-known firm of Little and O'Connor. It was a matter of great regret that President Butler and Mayor Low were both prevented by other engagements from being present at the dinner.

The exhibition inaugurated by this dinner, although somewhat sparsely attended during the week of its continuance from November 3 to November 10 (owing probably to inadequate advertising), was from the artistic and professional viewpoint a success and was highly creditable. The Vanderbilt gallery was filled with the works of former students, and presented an impressive record of achievement: more than one visitor expressed surprise at the large and important part played by Columbia men in the architectural progress of the city and country, and at the number of Columbia names among those of the leading architects of the city. The South Gallery and the three intermediate rooms were hung with undergraduate and post-graduate students' work in design, drawing, engineering and other lines of study, making a presentation remarkably rich, dignified and varied.

The new course of public lectures on the Fine Arts, inaugurated this year as a part of the new Fine Arts activities of the University, has proved a distinguished success, alike in the quality of the lectures and in the numbers, character and interested attention of the audiences. The first six lectures were given by the following lecturers: Dr. A. L. Jones of the Department of Philosophy, two lectures on the Point of View and the General Principles of *Æsthetics*; two lectures by Professor A. D. F. Hamlin respectively on Architecture in its relations to History and on Moslem Religious Architecture; and two by Professor A. V. Williams Jackson on The Art of India and the Art of Persia. Professor Clarence H. Young, Dr. Jones and Mr. E. R. Smith, of the Avery Library, are announced to continue these lectures in a second series dealing chiefly with Greek art. The existence of a wide and discriminating public interest in the literary, historical and philosophical aspects of the fine arts is amply demonstrated by the attendance on these lectures, which are given at 4:30 o'clock in the afternoon in the large lecture room of Havemeyer Hall.

RELIGIOUS INTERESTS

Chapel Service.—The daily chapel service of the University, required by statute, has been held since October of this year in the West Assembly room on the main floor of Earl Hall. Until there is a suitable chapel built, this is the most appropriate and the best arrangement that can be made. The hour has been changed to nine o'clock, ten minutes earlier than heretofore, to allow more time for students and professors at the close of the service to reach their places of work. A choir of four selected voices leads in the singing, and, all present participating, the music is very hearty and inspiring. Considering the early hour, the absence of dormitories upon the university grounds, the want of proper surroundings to make the services seem devotional, and considering, above all, that it is wholly voluntary, the attendance is gratifying. While it is never large, different students attend each morning, and all who attend do so from proper motives, and with earnestness of spirit. Services are held also both at Teachers and Barnard Colleges, detailed reports of which will be found elsewhere in this publication.

The following officers and professors have already made, or have promised to make, addresses at the Chapel services on Wednesday mornings of this Academic Year:

First Term: October 6, President Butler; October 15, Dean Van Amringe; October 22, Dean Hutton; October 29, Dean Russell; November 5, Dean Kirchwey; November 12, Professor Rees; November 19, Dr. J. H. Canfield; November 26, Professor W. H. Carpenter; December 3, Professor Sloane; December 10, Professor Burr; December 17, Professor Giddings; January 7, Professor Burdick; January 14, Professor Trent; January 21, Professor Kemp.

Second Term: February 9, President Butler; February 18, Professor Clark; March 4, Professor Thomas; March 11, Professor Hamlin; March 18, Professor Woodbridge; March 25, Professor Bogert; April 1, Professor Redfield; April 8, Professor Osborn; April 15, Professor Todd; April 22, Professor Wood; April 29, Professor Perry; May 6, Professor Egbert.

The stated public services at the chapel are supplemented by personal work by the Chaplain, who spends his mornings at the University, and from 9:30 to 10:30 o'clock daily is at his office, No. 201 West Hall, for the convenience of students who may call. The best part of a Chaplain's work is done not at public service but in private conference.

Religious services find their justification in the life and work of those who attend them. Worship is best attested by work. Doctrine's best evolution is in duty. Creed is exhibited in deed. The religious work at the University cannot be all told by detailed reports of any of the organizations, since many of the efforts of the students and professors are very properly associated with parishes, settlements, and other agencies outside of Columbia University, but some idea of such work will be given in the reports of the Young Men's Christian Association, the Phillips Brooks Guild of Teachers College, and the Young Women's Christian Association of Barnard College.

Any comparison between the past and present religious conditions at Columbia suggests occasion for gratitude, and gives encouragement to prayer. Our cherished ideal may properly conclude this portion of our report. We dream of, pray for,

and never for one moment doubt that some day we will possess a beautiful Chapel building upon the grounds of Columbia University. In such a building, at the noon hour, kept wholly free for this purpose and for reasonable recreation and refreshment, there will be a brief, beautiful service, rendered by a well-trained choir of selected voices, accompanied by an organ of the finest manufacture, at which will preside an organist noted for his skill and musical ability. At such a service, from time to time, professors will address the students, and every Sunday afternoon at a vesper service there will be a sermon preached by some distinguished preacher in a course of what will be known as University Sermons; which, published in book form, will be a valuable addition to current literature. The Lord speed the day when sweet-sounding chimes will ring and summon us to such services in such a Chapel.

For any one desiring to erect a memorial that will be permanent, and every moment be doing good, here is a rare opportunity. To build and equip such a building, and endow its support sufficiently to insure proper daily services, and a course of University Sermons throughout the year, two hundred and fifty thousand dollars are needed; is this a large sum when what can be done with it is considered? We venture to say that nowhere else could the same amount of money do as much good.

The Chapel Service of Teachers College is held at 12:25 daily, except on Saturdays, and is limited in length to fifteen minutes, in order that students who could not otherwise be present may be enabled to attend. As a result of this limitation the attendance has reached this year an average of one hundred and twenty-five. The service is conducted on Mondays and Thursdays by Dean Russell, and on other days by various members of the Faculty, or occasionally by clergymen from different New York churches.

Young Men's Christian Association.—The officers of the Christian Association were not idle during the summer vacation. A strong delegation of forty Columbia students, representing almost every University activity, was brought together and sent to Northfield to attend the great Northfield student conference, lasting

from June 26 until July 7. At this conference, where every university and college of the East is represented by a delegation of its leading students, Columbia made a splendid showing in all the departments of the conference, and was especially successful in athletic sports, which are one of the features of the gathering. On the Fourth of July an intercollegiate track meet is held between the teams of the various universities there represented and Columbia won in this meet handily. The Blue and White was also champion in the basket-ball series, and took second place in base-ball. The ten days spent at Northfield were most beneficial to each delegate and to the work of the Association in Columbia.

While this conference was in session the Association completed plans for putting a tent up at Columbia camp where over 200 science students go to do their practical work in engineering. The project was brought before the science men, and after consideration they decided by unanimous vote to give it a trial. This tent was supplied with periodicals, newspapers and writing materials. A college man was engaged to look after it, to assist the men in every way possible, and to arrange for a series of attractive Sunday evening services, which were well attended and much appreciated by the men. Among those who addressed the men were: Dr. Franklin Carter, ex-president of Williams College; Rev. S. R. Colliday of Berkeley Divinity School, Rev. A. J. Gammock of New Haven, Rev. John Hutchins of Litchfield, Rev. C. Wilcox of Lawrenceville, and Rev. J. H. Hobb of Jamaica. These meetings were held just after supper, out of doors in the twilight. It has been decided by the students and professors that the Association tent must be a fixture in years to come.

While at Northfield there arose in the minds of some of the delegates the conviction that Columbia should have a distinctly Columbia settlement, such as are maintained by the students of Pennsylvania, Yale and Harvard. These men spent a good part of the summer looking over the field around the University. The neighborhood of Speyer's School of Teachers College was finally decided upon, and the use of that building was generously offered to the Christian Association for settlement work. The president of the Association appointed the following committee which chose Mr. M. H. Dodge as chairman: H. Richards, Jr., '03, R. B. Bartholomew, '03, G. H. Butler, Jr., '03, B. Lefferts, '03, L. Riggs,

'03, F. Clark, '03, L. Moen, '03, T. A. Allen, '03, N. W. Muller, '04, E. S. Whitin, '04, W. A. Tice, '04, O. R. Houston, '04, C. R. Toy, '04, James Meyer, '04, D. C. Brace, '04, J. A. Taylor, '05, and R. S. Pierrepont, '05. This committee has secured Mr. H. R. Mussey, a tutor in the University last year, to manage the Settlement and give his personal attention to its development. The first week ended with more boys and young men applying for membership than the capacity of the building would permit. About thirty students are already going down one night a week and entertaining the boys with games or manual training classes. Debating clubs, good citizenship organization, etc., will soon be formed so that every member of the society may come under the influence of the club. The outlook is very promising for a most successful settlement.

In order to be fully ready for the opening of the school year some forty of those interested in Association work returned early to college to attend a conference on the subject. The principal speakers at these meetings were Robert E. Speer of Princeton, A. B. Williams of Yale, Orville Frantz of Harvard and James B. Reynolds, Secretary to the Mayor. These speakers spoke on the various lines of Christian work and stirred up the members of the Association to a greater desire to do an active, earnest year's work. Six small group Bible classes have been organized in the study of the Life of Christ, one in the study of the Acts and Epistles and one in the Teachings of Jesus and His Apostles. In addition to this, Dean Hutton will supplement the courses on the Life of Christ with a lecture once a month on that line of study. Classes have also been organized in the worldwide study of Missions.

A student praise service has been begun in Earl Hall on Sunday at 4 o'clock, the first religious services ever held in Columbia on Sunday. It was learned by investigation that nearly one thousand students lived within fifteen minutes' walk of the University. Some service specially designed for students was felt to be needed for those students who were away from home and not connected with any church. They are simple praise services, where there is hearty singing and frank short talks by recent college graduates. The increased interest of the students in the serious side of life and in good fellowship is very encouraging. The cause of this change can be very largely laid to the ever

extending influence of Earl Hall. The reading rooms, writing tables and game rooms are in constant use.

Other Religious Organizations.—The Churchmen's Association has begun the year with a greatly increased membership. The reception held on October 21 was very largely attended, and at this time a large number of new members were added to our ranks. After addresses by the Chaplain and two of the older members, refreshments were served, and everybody was well pleased with the success of the evening. As St. Luke's day came on Saturday, the attendance at the first corporate communion was not so large as one might have wished, but a better attendance is expected on St. Paul's day. At the first business meeting, to outline the work for the year, it was decided to have public addresses by Bishop Potter and Mayor Low, and evening addresses to the members by Bishop Hall and Dr. Rainsford. It is also hoped that we may be able to hold a devotional meeting, as last year, led by the Rev. Fr. Huntington, O.H.C., but this cannot be finally decided upon until the next meeting.

Phillips Brooks Guild.—The Guild is a religious organization of the Teachers College, and has for its members both men and women students, and members of the faculty. It is entirely undenominational and invites all who reverence God and desire to be useful in this world to become members. Its work is primarily for the college, and its great aim is to promote good fellowship and mutual helpfulness in the daily life of the college, which it believes to be the highest expression of the religious life. The membership of the Guild is about 200. It maintains a Bible class, meeting once a week under Dr. R. H. Hodge, of Union Theological Seminary, and a mission study class, which begins in November. Its members are also engaged in a variety of outside settlement work; five doing Bible settlement work under Dr. W. W. White, a number carrying on the girls' clubs at the Speyer School, and ten others being occupied with Sunday-school work at the Sheltering Arms. The Guild will hold monthly meetings in Earl Hall, where various phases of religious work will be presented by outside speakers. Informal teas will also be held weekly at Earl Hall.

The Young Women's Christian Association.—The Young Women's Christian Association of Barnard College has for its objects "the development of Christian character in its members and the prosecution of active Christian work, particularly among the young women of the institution." Active membership in the Association is open to all undergraduates who are members of evangelical churches. All other students and alumnae may be associate members. Any trustee or friend of the college who pays at least the annual membership fee of fifty cents may be a sustaining member.

On account of their many duties as students, members of the Association are not able to undertake a large amount of philanthropic work. There is always an opportunity, however, to amuse the children in St. Luke's Hospital, and at Thanksgiving and Christmas clothing, toys, and money are regularly sent to the Y. W. C. A. Settlement in West 47th Street.

One most important feature of the work done in college is to be found in the Bible classes, conducted weekly by members of the Association. The courses this year are as follows: Freshman, The Gospels; Sophomore, The Pauline Epistles; Junior, Old Testament Characters; Senior, The Teachings of Jesus. Last year forty girls, or about fifty per cent. of the members of the Association, were enrolled in these courses.

Particular attention is given to the work of foreign missions. After the Student Volunteer Convention held last winter in Toronto, a mission-study class of about twelve was held weekly until the close of the college year. This year it is planned to conduct two such classes, one to deal with India the first term and Japan the second, the other to study the lives of famous missionaries.

A chapel service, held twice every week, on Tuesdays and Fridays at 12:30, was originally begun and conducted by members of the Association. During the past year these services, under the charge of Dean Gill, have increased in interest and attendance to a marked degree. This change has been brought about largely by the addresses of various prominent clergymen, invited by the Dean to address the students. A list of the speakers secured for the next few weeks is as fol-

lows: Dr. Alfred E. Myers, Dr. Henry M. Sanders, Dr. Henry E. Cobb, Dr. Harry P. Nichols, Dr. J. Ross Stevenson, and Dr. Wm. H. Huntington.

One great privilege of the Association is attendance at the intercollegiate conferences held every summer. Fifteen Barnard students represented the college at the Silver Bay Conference last July.

For the convenience of Freshmen and other new students, at the beginning of each college year a handbook of various information is issued. It gives a list and brief description of all student organizations, suggestions to Freshmen, places of interest in New York, and a complete list of churches.

That the social life of the Association may not be neglected, the members and their friends meet informally at tea every Monday afternoon in the rooms reserved for them in Earl Hall. A reception of welcome also is given at the beginning of every year to new students.

THE GYMNASIUM

The new year has been marked by great activity in the use of the Gymnasium. The attendance on the exercising floor alone has several days reached nearly 600 and visitors, at certain hours, have crowded the rail of the large balcony. The department was early confronted with the prospect of shortage in the supply of lockers. Before another season, additional accommodation in this respect must be made to meet comfortably even the present demand.

An additional class in advanced gymnastics, including wrestling, fencing, and apparatus work, was formed at the beginning of the year and thrown open to all members of the University—officers and students. This is decidedly a step forward in that it provides optional instruction in these branches for the first time. The hour has been set at 5 o'clock, Tuesday and Thursday, at a uniform hour with the optional classes in elementary gymnastics on Monday, Wednesday, and Friday. The department would be pleased to have all who can spare the time attend these classes.

A second edition of the Gymnasium Guide is in press and will soon be ready for distribution. Much revision has been made and new material added, which we hope will be an improvement upon

the old Guide and make a useful handbook for members of the University. The contents of this booklet are as follows: Equipment, privileges, and courses; information regarding use of the Gymnasium; the benefits of physical exercise; personal hygiene; order of exercise; list of measurements and strength tests; prescription of exercise; rules for strength test with intercollegiate records; gymnastic champions of Columbia and intercollegiate contests; medical aid for students.

THE COLLEGE

General.—The following are the minutes on the death of Professor Rood, adopted by the Faculty of the College at a special meeting held November 14, 1902:

In the lamented death of Ogden N. Rood, head of the Department of Physics in Columbia College for thirty-eight years, the College has lost a professor of exceptional capacity and attractiveness in elucidating to students the principles and the application of the science to which he was devoted; of remarkable fertility of resources in the discovery of new and recondite truths in the wide domain of physics; and of lucidity and force in presenting the results of his investigations. The Department of Physics, when he took charge of it in 1864, was poorly furnished and much restricted in its activity; he made of it a department which is probably not surpassed by that of any institution of learning in the country in equipment, efficiency, the extent and value of its researches, and in influence at home and abroad. His high repute among scientific men everywhere confers distinction upon the University with which he was, happily and for so long, connected.

His personal qualities were such as to compel the admiration and the affectionate regard of those who had the good fortune to know him well. With pronounced artistic temperament and skill, he united a solid judgment, a wide, varied, thorough and exact knowledge in several departments of inquiry other than the particular one in which he was eminent, a creative imagination, and a felicity of expression at once clear and impressive, that made him a conversationalist of rare charm and power, and a most desired companion.

The Faculty of Columbia College deeply deplore their personal loss in being deprived of their accustomed association with him, and their official loss in losing his advice and counsel in the conduct of affairs with which they are charged, and to his family in their bereavement they express a most respectful and sincere sympathy.

Department of Classical Philology.—A special meeting of the Classical Club for the election of officers was held on October 23. Professor Peck was reelected President, Professor Earle Vice-President and Professor McCrea Secretary. Mr. Harwood Hoadley was chosen Treasurer.

Department of Comparative Literature.—Professor Woodberry and Dr. J. E. Spingarn of this department with Professor J. B. Fletcher of Harvard, are to be the editors of the *Journal of Comparative Literature*, an international quarterly devoted to the general field of European literature, of which the first number will appear on January 1.

Department of Romance Languages and Literature.—In the Summer Session of 1902 three courses were offered by this department, an elementary course in Spanish and an elementary and an advanced course in French.

A feature of the work this year is the number of graduate students taking courses with this department. The seminar in Romance Literature conducted by Professor Cohn is attended by nineteen students, and the seminar in Romance Philology and Romance Philology I, both conducted by Professor Todd, have an attendance of eight and ten respectively.

During the summer the Macmillan Company issued two volumes in the series of Studies in Romance Philology and Literature, "Corneille and the Spanish Drama" by Dr. J. B. Segall and "Dante and the Animal Kingdom" by Dr. Richard T. Holbrook, who is assistant in French in Teachers College.

Through the kindness of John Edward Kerr, Jr., of New York, the unique manuscript of the Roman dou Lis, an Old French poem of the thirteenth century, which was recently purchased by him from Quaritch in London, has been loaned to Professor Todd, under whose direction it will be critically edited by F. C. Ostrander, Fellow in Romance Languages and Literature.

The Thursday public French lectures were resumed on November 6, when Professor Cohn spoke on Emile Zola. Among the

foreign lecturers engaged for the course this year are: Dr. Germain Martin, Maître de Conférences in the Law Faculty of the University of Paris, whose subject is "French Industry in the Seventeenth and Eighteenth Centuries"; and Professor Léopold Mabillean, whose visit last year is too well remembered for him to need a new introduction to the American public.

Two members of the department are to lecture this year for the Board of Education in the course of free lectures for the people; Dr. Page, whose subject is American Poetry of To-day; and Professor Cohn, who repeats his course on "Masters of French Drama."

FACULTY OF MEDICINE

General.—For the present year a slight increase in the requirements for admission to the College has been made by requiring all of the 48 Regents' counts to be obtained before entrance, no student being admitted with conditions. This has had a gratifying effect, the entering class numbering 201 as compared with 269 of last year. Of the total number, 69, or 34.32 per cent., have received college degrees, an increase of 7.93 over the percentage of students possessing degrees in last year's entering class.

Department of Diseases of Children.—Dr. L. E. LaFetra has been appointed to the position of Chief of Clinic, *vice* Dr. Francis Huber resigned. Dr. John Howland and Dr. H. McConnell have become clinical assistants in place of Dr. Joseph Huber and Dr. William McHale resigned.—Dr. L. Emmett Holt has been promoted from the position of Clinical Professor, to that of Professor of Diseases of Children, *vice* Dr. Abraham Jacobi resigned. Professor Holt received the degree of A.B. from the University of Rochester in 1875. After spending one year in the study of medicine at the University of Buffalo, he entered the College of Physicians and Surgeons in 1878 and graduated in 1880. He was one of the ten honor men in the class, which included Professors Starr, Tuttle, McCosh, and Hartley, Dr. J. S. Thacher, and the late Dr. J. West Roosevelt. Subsequent to graduation he served as an interne at Bellevue Hospital on the surgical staff for one year and a half. He was attending physician to the New York Infant Asylum for eight years, to the Infants' Hospital on Randall's Island for two years, and to the Nursery and Child's Hospital for four years. Since 1888 he has been attending physician

to the New York Foundling Hospital. Since 1885 he has been a frequent contributor to current medical literature on various topics connected with the diseases of children. He was the author of the chapters on Acute Intestinal Diseases in Keating's Cyclopaedia, 1890. In 1896 he published, through D. Appleton & Co., a "Text Book on Diseases of Infancy and Childhood," which has had a wide circulation and is now in the second edition. In 1894 he published a popular monograph on "Care and Feeding of Children," which has passed through several editions. He was president of the American Pediatric Society in 1896, and Professor of Diseases of Children in the New York Polyclinic from 1892 to 1901, which position he resigned to accept the Clinical Professorship of Diseases of Children in the College of Physicians and Surgeons. He has been largely instrumental in the organization of the Rockefeller Institute for Medical Research, and is a member and secretary of its Board of Directors. In 1902 the University of Rochester conferred upon him the honorary degree of LL.D.

Department of Laryngology.—The following notes of the work done in this department during the past year may not be without interest to the general reader.

The work is carried on by the aid of twelve clinical and six student assistants. The latter change with each college session and, among the former, the following changes have taken place during the year. Dr. Edmund W. Bill has resigned after a faithful service of seven years; Dr. Lee M. Hurd has been advanced from the grade of Junior to that of Senior Surgeon and placed in charge of a clinic for men; Dr. F. Conger Smith has been appointed a Junior Surgeon and Dr. C. B. Van Wagenen has become an assistant in the amphitheatre during the lecture course.

During the last college session (October to May) 2,145 new patients were registered in the books of the department, at the Vanderbilt Clinic, and 5,132 visits were made to the daily clinics by patients with diseases of the throat and nose. The plan of utilizing this material for teaching purposes is as follows:

1. All patients visiting the Clinic on Tuesday, Thursday and Saturday are personally examined by the students in the practical courses of instruction.

2. Such cases as are not adapted for examination by large numbers are demonstrated to these students, individually, by the Instructor in Laryngology. The actual work done by the students and instructor, under these circumstances, is shown hereafter in this article.

3. Each Monday, at the conclusion of the weekly didactic lecture by Professor Lefferts, a notice to the clinical assistants is posted, informing them as to the subject of the following week's lecture and the amount and nature of the illustrative material that is wanted. Such patients are then collected during the week, by each of the eight clinical assistants, from their clinics, and ordered to report personally to the professor prior to his lecture. He selects from them such as are best suited for his illustrative or operative purposes and presents them to the class.

The large Ambulatorium connected with the Department of Laryngology renders it possible, with very few exceptions, to present illustrations of even the rarest character (such as laryngeal tumors, etc.) at the proper lecture, a matter the difficulty of which will be appreciated by every clinical teacher. The large number of patients in daily attendance upon the Clinic gives ample opportunity for frequent examinations by the student during his practical course, despite the fact that the teaching of laryngology always involves some physical discomfort to the patient and that, therefore, a very large amount of teaching material is necessary in order that the unavoidable secession of patients may be constantly replaced by new material.

Twenty-eight didactic and demonstrative lectures are given to the fourth-year class, collectively, in the amphitheatre of the Vanderbilt Clinic, during the session, by Professor Lefferts. Each lecture of one hour is complete, both in matter and illustration, in itself, and the subject and date of each is announced in printed form at the beginning of the session. Each student receives a copy of a synopsis of the classification, method of teaching, illustration, etc., of each of the subjects considered during the course. It may be interesting to know that these lectures were attended as follows: Out of the possible 143 students (the class of 1901 numbered 149, and 6

were always on duty at the Sloane Maternity Hospital), the average attendance was 147—the largest number present at any one lecture being 181. These figures speak for themselves as showing that the lectures attracted an audience aside from that of the fourth-year class in regular attendance, and prove the interest and regularity of attendance of those whose duty it is to be present.

This year, as in former ones, additions have been made to the teaching apparatus, charts, drawings, models, etc., the cost being defrayed by Professor Lefferts personally, and some changes suggested by experience have been made in the method of conducting the course. Such additions and changes, it is believed, add to the practical worth of the instruction; at least such is their purpose.

Practical instruction is the live teaching question of the day. The department attempts to solve it as follows: To the class of 1901 eight courses of practical instruction were given, the number of lessons in each varying from 9 to 12 and the number of students from 17 to 20. The total number of students being 149, the average attendance upon the sections was 141, and the percentage of attendance was 94.7 per cent. The work done by each of the eight sections and that individually accomplished, on the average, by each student, is as follows: The students had, during the period of their practical work, 1,896 normal cases presented to them for examination, 1,193 abnormal ones, and 783 demonstrations were made to them, individually, by the instructor.

These special cases illustrated some point in differential or bacteriological diagnosis, some question of treatment, or some unusual or peculiar pathological lesion. Individually, each student has personally examined, during his course of practical instruction in laryngology, on the average, 237 normal cases, 148 $\frac{1}{8}$ pathological cases, and has had demonstrated to him 97 $\frac{7}{8}$ cases. His practical experience has, therefore, amounted to 484 cases. In addition, he has attended the above lectures of Professor Lefferts treating of such general principles of pathology, diagnosis and therapeutics as concern diseases of the throat and nasal passages, each lecture being illustrated by wall plates in color, models, pathological specimens,

apparatus, and instruments, and, as the subject may demand, either the presentation of selected cases with a colored-chalk blackboard sketch of their pathological and diagnostic appearances, or by the personal demonstration of the patient with the aid of the laryngoscopic or rhinoscopic mirror.

The ultimate aim of such clinical, practical and didactic teaching is, not to make a finished specialist of the student, but to give him a stable groundwork in the specialty; namely, some manual dexterity in the use of the necessary instruments for examinative purposes, and at least a useful familiarity with both normal and the commoner abnormal appearances of the upper air passages. With such a basis self-instruction after graduation is easy, as the opportunities therefor in general practice will be many, if properly and earnestly sought, and will be efficient, as both operative skill and pathological knowledge may be expected with increased experience.

Department of Pathology.—Dr. Charles Norris has been appointed Assistant in Bacteriology, to succeed Dr. Neumann; Dr. C. W. Field, Assistant in Pathology, to succeed Dr. Hubbard; Drs. L. R. Williams and R. E. Buffington, Assistants in Normal Histology, to succeed Drs. Crampton and Miller. Dr. Norman E. Ditman has been appointed Assistant in Clinical Pathology. Dr. Hughes Dayton has been appointed for the current year to one of the Alumni Association Fellowships in Pathology.

The activities of this Department are largely turned to undergraduate instruction, since students from each year of the curriculum are given practical laboratory work in some of the sections. Thus, aside from shorter courses and demonstrations, over seven hundred and fifty students during the session are instructed in classes which continue for one quarter or one half of the year.

A considerable amount of research work is however kept in hand, and Volume VIII of the collected Studies from this Department has just been issued. Two of the Fellows of the Rockefeller Institute for Medical Research are in part carrying on their work in this Department. The character of the research work in general reflects the new outlooks in the knowledge of immunity which the world over now dominate the institutes of pathology.

Dr. Hiss has perfected and simplified his method for the detection of typhoid bacilli, and has devised some new methods for morphological and cultural differentiation between pneumococci and streptococci. Dr. Wadsworth has nearly completed a study in experimental pneumonia, and Dr. Norris a series of studies on bacterial precipitins. Dr. Wood has been studying the changes induced in the blood in experimental anæmias of animals. Drs. Wood and Jessup are engaged in a study of precipitins secured by the adaptation of animals to various albuminous and allied substances. Dr. Leaming is occupied with new methods of natural color photography as applied to lantern slides.

Department of Physiological Chemistry.—Mr. P. B. Hawk, assistant in this Department, was given the degree of M.S. by Yale University last June. The subject of his thesis was, "Some Experiments on the Influence of Rennin on the Digestion of Proteids."

Professor Gies spent part of the summer at Wood's Hole, coöperating in research with Professor Jacques Loeb in animal physiology, and with Dr. R. H. True in plant physiology. The results of each investigation will soon be published.

Dr. A. N. Richards, assistant in this Department since its establishment four years ago, has been advanced to the grade of Tutor.

Professor Gies has been appointed Consulting Chemist to the New York Botanical Garden. The acceptance of this position is expected to result in enlarging the scope of biochemical research in the University.

Mr. H. M. Hays, at present a student of advanced physiological chemistry, has recently issued a volume of questions and answers in physiological chemistry founded on Course I given in this Department.

Professor Gies has offered a new course—physiological chemistry of plants. The course is intended especially for students of botany and pharmacy. Professor Gies will also assist Professor Lee in the new course in physiology given at Columbia College.

Experimental researches under the auspices of the Rockefeller Institute of Medical Research have recently been completed in

this Department by Dr. A. N. Richards, assisted by Mr. C. H. Vosburgh, and by Dr. W. Salant. Dr. W. A. Taltavall, working in this Department, has recently coöperated with Dr. A. J. Lartigau in a research in chemical pathology. Dr. E. B. Coburn has lately been engaged in this Department in work on uric acid and related substances in their bearing on certain diseases. Professor Gies has coöperated with Dr. S. J. Meltzer in investigations, in this Department, on the influence of strychnin under various conditions; and with Dr. T. S. Hart, in a study of fatal diabetes.

The number of research workers and candidates for higher degrees is this year the largest in the history of the laboratory.

Department of Physiology.—Professor Lee spent the summer months at the Marine Biological Laboratory, Woods Hole, Massachusetts, continuing his studies on the action of alcohol on contractile protoplasm. The results of his observations confirm in general those previously obtained with muscle, and will shortly be published. On November 14 Professor Lee gave the address before the School of Medicine at the quarto-centennial of the University of Colorado, taking as his subject "The Scientific Aspect of Modern Medicine."

At the end of the last academic year Dr. Green and Mr. Budington retired from the assistant demonstratorships. Their places are filled by the appointment of Drs. Haven Emerson and Russell Burton-Opitz. Dr. Emerson graduated from Harvard College in the class of 1896, and received the degrees of A.M. and M.D. from Columbia in 1899. He is assistant Attending Physician at the Lying-in Hospital, and Assistant Physician to the Out-Patient Department of Roosevelt Hospital and to the Wilkes Dispensary of the St. Mary's Hospital. He also holds a fellowship of the Rockefeller Institute for Medical Research.

Dr. Opitz studied at the University of Chicago, receiving from that institution the degree of M.D. in 1895, that of S.B. in 1897, and that of S.M. in 1898. Subsequently he studied in Vienna, and then held for three years an assistantship in the Physiological Institute of Breslau. During most of the time he was in charge of the investigations in histological physiology. Before returning to this country he was engaged in biological investigations at

the Zoölogical Station at Naples. During the year 1901-1902 he was an assistant in physiology in the Harvard Medical School.

Dr. R. H. Cunningham, who graduated in medicine in this College in 1888, has been appointed an instructor in electro-physiology. For several years Dr. Cunningham has been a research worker in the Department, and for a time was an Alumni Association fellow and also an assistant demonstrator in physiology. His present appointment is a recognition of his attainments in the field of electricity as related to physiological phenomena.

By the aid of the gift provided last year for this purpose, an outfit of apparatus has been purchased and a room has been fitted up in Schermerhorn Hall for work in physiology by undergraduates in Columbia College. A new course has been inaugurated primarily for juniors and seniors, and is being given by Professor Lee and Dr. Opitz with the coöperation of Professor Gies of the Department of Physiological Chemistry. This course supplies a need that has long been realized.

Department of Practice of Medicine.—Dr. Walter B. James has been promoted from the Lectureship to the Professorship of the Practice of Medicine.

FACULTY OF APPLIED SCIENCE

SCHOOL OF CHEMISTRY. General.—Chemistry was included for the first time, this year, in the summer session of the University which lasted for six weeks, beginning July 7. The following courses were given by Professor Miller, Dr. Jouët and Dr. Chambers. *General Chemistry*: An elementary course equivalent to the entrance requirements now in force in the schools of applied science; *The Teachers' Course in Chemistry*, arranged especially to meet the needs of those teaching chemistry in high schools; *Qualitative Analysis*: The equivalent of the regular first-year course; *Quantitative Analysis*: A short course less technical than the applied science courses.

The quantitative laboratory was also open to special students who did not wish to take any of the regular courses. The number of students attending these courses was fifty-nine and the work done was most satisfactory.

The death of one of the officers of the department, Mr. G. C. Hubbard, occurred last May, after an operation for appendicitis.

Mr. Hubbard was a graduate of the School of Chemistry in 1901 and was assistant in assaying up to the time of his death, having charge of the practical work of the assay laboratory. His sudden death was a great shock and the cause of sincere regret to the department.

The present academic year finds this Department of the University in a very flourishing condition as to officers and students, both in numbers and in quality, but very much handicapped, if not indeed crippled, by the overcrowded condition of the laboratories.

Fortunately, when Havemeyer Hall was planned, the probability of large classes was duly recognized, and the main chemical lecture room was accordingly made the largest lecture room in the University. But if the classes continue to increase in the present proportions it will be impossible to accommodate them, even in the lecture room. The laboratories, as is seen below, are crowded at present almost beyond endurance.

General and Applied Chemistry.—The school has suffered a severe loss this year in the absence of Mr. Milton C. Whitaker, tutor in chemistry for the last four years, who resigned to take the responsible and important position of chemist to the Welsbach Light Company, of Gloucester City, N. J. Dr. Carl Ernst, B.S., Northwestern University, 1890, Ph.D. Leipzig, 1900, has succeeded Mr. Whitaker as tutor in chemistry.

The laboratory course in General Chemistry for Columbia College students, known as Chemistry 1, formerly given by Mr. Whitaker, has been changed to a new course, Chemistry 6, consisting of both lectures and laboratory work in elementary chemistry. This is intended to serve as an equivalent to the entrance examination in chemistry, and is required as a prerequisite to Professor Chandler's course of Chemistry 1, from all students who have not covered satisfactorily the same ground in their previous work.

Another course, Chemistry 10, on advanced inorganic chemistry, including the rare elements, formerly given by Mr. Whitaker, has been taken this year by Professor Pellew, and is now compulsory for all third year regular students in the School of Chemistry.

Industrial Chemistry.—The various courses given in this laboratory are all attracting their fair proportion of special

students and post-graduate students. Instruction is now being given in each of the three courses, inorganic preparations, dyeing and calico printing and electro-chemistry. The course in electro-chemistry has proven decidedly attractive. The capacity of the Electro-chemical Laboratory has been doubled, and its equipment improved until now it provides every facility both for regular instruction and for research work in this important branch of chemistry.

The Qualitative Laboratory is so crowded this year that no suitable room could be found there for Dr. Ernst, and so he has been invited to occupy room 418, Havemeyer, in the Industrial Laboratory, a room hitherto devoted to research work. Mr. Tucker and Dr. Ernst have begun a careful investigation on the subject of obtaining electrical energy from the oxidation of carbon and of carbon monoxide, with especial reference to the work of Dr. Borchers on this subject published some little time ago.

Physical Chemistry.—The work in this department has assumed such proportions that the services of an assistant have been found necessary, and Mr. Henry A. Jackson, B.S. (Princeton, '99), has received the appointment. As Mr. Jackson has had a year in Leipzig, under Ostwald, he is very well fitted for the position. This year there are six post-graduate students, candidates for the degree of Ph.D., three taking the subject as a major, and three as a minor; and twenty-five undergraduates. Professor Morgan is giving during the first term an optional course on electro-chemistry to the electrical engineers, which will probably become a required course next year.

Organic Chemistry.—During the past year a number of changes have been made in the courses in this subject.

In order more satisfactorily to prepare chemical students for the industrial chemistry and proximate organic analysis of the third year, elementary organic chemistry (Chem. 20) has been made a required subject for all second-year chemists. The course heretofore given to third-year chemists has been transferred to the fourth year and consolidated with the regular fourth-year course to a single course (Chem. 35) of five hours per week throughout the year. The general laboratory work

(Chem. 33) has been set off from the lectures as a separate course, to permit of its being elected by those who are already sufficiently well trained in the theoretical part of the subject. The conferences (Chem. 36) are now required of all students taking the organic option, and of those who, as candidates for higher degrees, take major courses in organic chemistry. A new advanced course is offered this year at Barnard by Dr. Chambers, and already several students have registered for it.

The progress of the department has been greatly aided and stimulated by the recent action of the trustees in advancing the grade of the associate from assistant to that of tutor, thus making it possible to retain an experienced man and steadily develop the work without the interruption consequent upon the breaking in of new men every year.

From the present outlook, the total enrollment in the various courses will exceed that of any previous year. It is an encouraging sign that there appears to be a steady and quite rapid increase in the number of those who elect the elementary courses, their value being well recognized by seniors in the college who expect to enter the Medical Department.

Professor Bogert has recently been elected a Vice-President of the Society of Chemical Industry (of England).

Quantitative Analysis and Assaying.—The crowded condition of the quantitative and assay laboratories is worse than ever before. In the first, every desk is taken and it is only possible to do any thesis work by utilizing the rooms of the instructors, and during the second half year a portion of the organic laboratory. In the second, the class taking the course during the first half year is so large that it has to be divided into two sections, which work alternately. This has made it necessary to keep the laboratory open every week day and to curtail somewhat the practical work.

The large section of mining engineers will also be divided for their recitations in quantitative analysis.

The changes in the staff have been: Mr. Everett J. Hall, formerly assistant in metallurgy, appointed to the recently created tutorship in assaying.

Mr. J. L. Danziger appointed assistant in analytical chemistry (quantitative) in place of Dr. Alfred Tingle, resigned.

Of those who received doctor's degrees in chemistry last year:

Dr. L. A. Youtz is now professor of chemistry at Lawrence University, Appleton, Wisconsin.

Dr. F. J. Metzger is private assistant to Professor Chandler.

Dr. C. J. Pretzfeld is with the National Electrolytic Company at Niagara Falls.

The number of undergraduate students in analytical chemistry is larger than ever before, and includes many new men from institutions all over the world who enter with advanced standing. The opening of the qualitative and quantitative laboratories in the summer session is of great assistance to these men, many of whom are behind in their chemistry, as it gives an opportunity to make up their laboratory work without interfering with the afternoon work of the regular session.

The demand for our graduates continues to be good—far greater than the supply.

The Columbia University Chemical Society.—The society held its first meeting, for the present year, on the afternoon of October 29, in Havemeyer Hall, and elected the following officers: *Honorary President*, Professor C. F. Chandler; *Honorary Vice-President*, Professor C. E. Pellew; *President*, Gail Merserau, '03 S.; *Vice-President*, S. Gaulbrandsen, '03 S.; *Secretary*, J. E. Goodell, P. G.; *Treasurer*, G. V. Williamson, '03 S.; *Executive Committee*, H. T. Beans, P. G., C. H. Dempwolff, '03 S., H. N. Cox, '04 S., A. W. Hahn, '05 S., C. G. Fink, '03, C.

A committee consisting of the officers of the society was appointed to draw up a new constitution and present it at the next regular meeting, and the Executive Committee were authorized to arrange, at an early date, for a dinner.

SCHOOL OF MINES. General.—The enrollment this year shows a further increase in the number of students in mining, the total at the time of writing being 190, as against 155 last year and 124 the year before. Of these 33 are graduates of Yale, Harvard, Princeton, Cornell, Amherst, Williams and

other colleges, or of scientific schools, including Stevens, Rensselaer, Rose Polytechnic and others. Twenty-one institutions are represented. In addition, 44 students have averaged about two years in college or scientific school before coming here, including 20 students from fourteen different mining schools here and abroad. 66 students, more than one-third the total number, come from mining states outside of New York and New Jersey, including Pennsylvania, Ohio, Illinois, Michigan, Missouri, Nebraska and Minnesota, and farther west, Montana, Wyoming, Colorado, Utah and New Mexico, and from the Pacific Coast, California, Oregon, Washington and Alaska.

James Farley McClelland, E.M. 1900, has been appointed Lecturer in Mining, a new position created by the Trustees in view of the large and increasing number of students in mining. Mr. McClelland was last year Instructor in Mining at the School of Mines of the University of Wyoming, where he succeeded Charles H. Fulton, E.M. 1897, who is now Professor of Mining and Metallurgy at the State School of Mines of South Dakota. Mr. Thomas Thornton Read, E.M. 1902, succeeds Mr. McClelland at the University of Wyoming.

The School of Mines is now, or has been at one time, represented by graduates on the staff of the following institutions: Harvard, Princeton, Johns Hopkins, University of the City of New York, Manhattan, Brooklyn Polytechnic, Rutgers, Brown, Vermont, Pennsylvania State, Oberlin, Ohio State, Vanderbilt, Washington (St. Louis), Colorado (Colorado Springs), Wyoming, Utah, Idaho, Montana (Agricultural) and Washington (Agricultural), at the State Mining Schools of Michigan, Minnesota, Colorado and South Dakota, at McGill University in Canada, and at the University of Tokio, and the Tokio Agricultural College in Japan.

In June and July last the Summer Class in Mining visited the well-known silver-lead mines in the vicinity of Park City, Utah, 35 miles northeast of Salt Lake City. Most of the class work was done in the Daly West mine, through the courtesy and liberality of the management. Four weeks were spent at this mine in surface and underground study, together with the usual underground surveying, which was carried on con-

tinuously by successive squads of students. Short visits of a couple of days each were afterward made to the neighboring Ontario and Silver King mines. The Daly West and Silver King mines furnish the bulk of the product of this important district, each paying at present about \$1,000,000 per year in dividends. In connection with the geological field work under Professor Kemp, the class also had opportunities to see several of the mines in Bingham Canyon, 28 miles southwest of Salt Lake City.

The class consisted of 22 students and was in charge of Adjunct Professor Peele, assisted by Messrs. E. L. Kurtz and J. F. McClelland, of the Department of Mining. After the close of the session some of the students visited other mining districts in the West and Northwest. Also, six members of the third and fourth classes, several of whom had had previous practical experience, made independent trips during the vacation, or obtained positions at various mines, in lieu of attendance at the Summer School.

Department of Metallurgy.—The staff of the Department has been strengthened by the appointment of Mr. Bradley Stoughton, Ph.B., Yale, 1893, S.B., Mass. Inst. of Technology, 1896, as Instructor in Metallurgy, to succeed Mr. W. A. Bentley, S.B., resigned. Mr. Stoughton has had several years' experience in conducting the Bessemer process, and is favorably known as a metallurgist and administrator. Mr. Hercules W. Geromanos has been appointed Tutor in Metallurgy.

The most important work of the year has been the development of an analytical metallurgical laboratory course. In the *QUARTERLY* for March, 1901, an account was given of a short metallurgical laboratory course for students in mining engineering. Since that account was written the analytical method of laboratory teaching has been greatly elaborated in the department, so as to provide nearly a hundred experiments for undergraduates and even for advanced students in metallurgy.

The purpose and function of these experiments is fully set forth in the preface to Professor Howe's "Metallurgical Lab-

oratory Notes," recently published by the Boston Testing Laboratories (446 Tremont St., Boston, Mass). Lack of space forbids quoting this presentation of the principles underlying this series of experiments; but they may be explained in a few words as analytical rather than industrial, the object being to teach "not individual processes as a whole, but the individual underlying principles, each by itself. . . . Principles are what the laboratory teaches most readily and perfectly, and practice least readily and most imperfectly." The details of practice are best learned in practice itself. These experiments, furthermore, serve to give a certain skill in the use of the instruments of precision of the art as necessary to the metallurgist as skill in the use of the transit to the engineer. They have nearly all been worked out in the actual experience of the laboratory of the School of Mines or the author's own private laboratory, with the efficient assistance of Messrs. Bradley Stoughton and E. J. Hall, to whom heartiest thanks are due.

Professor Howe has been elected an Honorary Member of the Russian Imperial Technical Institute of St. Petersburg.

At the Budapest Congress of the International Association for Testing Materials, in September, 1901, he was elected President of the most important section, that of metals, as well as Honorary President of the whole Congress. He delivered an address at the opening of the Gayley Laboratory of Chemistry and Metallurgy at Lafayette College, Easton, Penn., April 5, 1902.

The investigation conducted during the past year in the Department laboratory by Professor R. H. Bradford of the University of Utah has brought him the degree of Ph.D. at Columbia; that of Dr. Mathews, Barnard Fellow and Carnegie research scholar of the British Iron and Steel Institute, has brought him the gold medal of that institute. Mr. Wm. Campbell, University Fellow, has won the Carnegie Research Scholarship of the British Iron and Steel Institute for the coming year.

Professor Bradford's very important work was made possible by the appliances for very precise heating which have been developed for the use of the Department. These will be added to during the coming year, and several new furnaces

with special appliances for extreme accuracy of temperature control are now under construction. The Department has added a chlorination barrel, six amalgamating pans, electrolytic arrangements, and a set of rolls driven with power for investigating some of the more pressing industrial questions connected with the properties of steel.

A large number of galvanometers wound for use in connection with the Le Chatelier thermo-electric pyrometer will be added to the equipment of the Department at once, so that hereafter each student working in the laboratory will have the exclusive use of one of these pyrometers. This step has been found desirable, because almost every investigation or experiment made is the better for having its temperature under direct control.

FACULTY OF POLITICAL SCIENCE

Professor Sloane presided at the dedication of the memorial chapel to Miss Porter at Farmington, Conn., on October 28. The chief address of the occasion was made by Professor Sloane, who has been for many years a Trustee of the school.

Professor Robinson delivered an address on October 18 before the New England History Teachers Association in Boston. His subject was the constantly recurring problems which confront the teacher, who in dealing with the historic figures in history, must strive to maintain the idea of historical continuity. He dealt also with the methods of treating those religious questions which are still the subject of controversy. Professor Robinson also officiated as a delegate of Columbia University at the installation of President E. J. James at the Northwestern University on October 21.

Professor J. B. Clark attended the conference on Arbitration in Labor Matters at Minneapolis in September. At various cities on his way to and from that convention he delivered a series of lectures on the relations of labor and capital. Professor Clark was also a delegate representing Columbia University at the installation of President Wilson at Princeton.

FACULTY OF PHILOSOPHY

Department of English Literature.—Last spring Professor Brander Matthews delivered in London, before the Royal In-

stitution of Great Britain, a course of three lectures on "The Development of the English Drama." Messrs. Charles Scribner's Sons have recently issued the fifth volume of the uniform edition of Professor Matthews' essays in criticism, which now includes "French Dramatists of the Nineteenth Century," "The Historical Novel," "Parts of Speech," "Aspects of Fiction," and "Pen and Ink."

There is this year a marked increase in the number of graduate students in attendance on courses in English. Seventy-one students are taking English as a major subject as against forty in 1901-02.

FACULTY OF PURE SCIENCE

Department of Astronomy.—The Department of Astronomy has ordered from Carl Bamberg, of Berlin, a fine universal transit instrument. This instrument is expected to arrive in the course of the winter, and has all of the latest improvements. It will be used mainly by candidates for the degree of Ph.D. and A.M.

The officers of the Department of Astronomy are engaged in preparing for the *Annals of the New York Academy of Sciences*, the results of their observations on variation of latitude; work is also being continued under Professor Jacoby's direction on Polar plates, made at various observatories in the world.

Professor Rees, on the invitation of President Engler, delivered the Commencement address at the Worcester Technical Institute, Worcester, Mass. His address dealt mainly with advances in astronomical photography. Dr. S. A. Mitchell is giving a series of lectures on astronomy for the Board of Education in New York City.

The Department of Astronomy has announced for Wednesday, November 5, and Thursday, December 4, lectures on interesting astronomical subjects by Professor E. E. Barnard and Mr. Ritchey, of the Yerkes Observatory, Chicago University.

Department of Botany.—Extensive additions have been made to the equipment and educational appliances of the laboratory during the past year. Dr. Curtis has prepared a series of

stem structures to illustrate the phenomena of growth, branching, texture, and grain of wood. With this he has made an extensive collection of the foliage, flowers and fruits of our native trees and shrubs. These have been largely brought together during the past summer and it is proposed to display them in a series of swinging frames so that the comparative characters may be presented to students. Sections of trunks showing bark and wood characters supplement this collection. Over one hundred photographic views of adaptive features of vegetation have been added to the collection, thus making it year by year of increasing educational value as well as adding an attractive and decorative feature to the laboratories. Several of these views were obtained during a ten days' survey in eastern Long Island with a party of students. A considerable series of photographs of the famous botanical gardens of the world have been hung in the halls, including extensive series from Buitenzorg, St. Petersburg, Berlin, and Trinidad. Among the more important acquisitions of apparatus by purchase may be mentioned a Gerhardt balance, filter screen for controlling the quality of light admitted to the dark room and the valuable series of Frank and Tschirch physiological charts, sixty in number.

No less important for the graduate work are the continued additions to the equipment of the laboratories at the Botanical Garden. In connection with Dr. Gies' appointment as consulting chemist, the laboratories for chemical physiology are being thoroughly equipped for work, and new courses in pathology, chemical and physical physiology, and economic botany are being offered to research students. The additions to the collections, both in the herbarium and in the conservatories, have been notable during the past six months.

Dr. D. P. Anderson, whose researches on starch have attracted wide attention, has secured patents on all the twelve points claimed in his discovery, and is now connected with an extensive laboratory at Minneapolis for continuing his researches and perfecting the apparatus for the manufacture of his starch foods. He has already solved the problem of the adaptation of his discovery to the process of manufacture in commercial quantities.

Dr. Tracy Elliot Hazen has succeeded Dr. Anderson as Assistant in Botany. Dr. Hazen was a graduate student in Columbia for three years, holding a fellowship during the last two. His work on the Ulothricaceæ and Chætophoraceæ of the United States, with twenty-three tinted plates, has just appeared and will set a pace for the systematic study of our fresh-water algæ, both in clearness and accuracy of treatment.

Dr. W. A. Cannon, Fellow in Botany during the past two years, has received an appointment as laboratory assistant at the New York Botanical Garden.

Professor Underwood has commenced his seventh year of instruction in the Department and will be absent on leave during the second half-year, commencing January, 1903. He will spend six months in the West Indies, visiting Jamaica, eastern Cuba, Dominica and possibly others of the Lesser Antilles, studying the ferns of tropical America in the field, preliminary to his forthcoming monograph on the ferns of North America.

Department of Geology.—The Geological Department has, during the past year, added four new courses: No. 14, Phylogeny of a special group of invertebrates; 16a Fossil Faunas, a study of the invertebrate faunas of the various geologic horizons of North America; 16b, the preceding course enlarged leading to a minor or a partial major degree; 17, Stratigraphy, a study of the fauna of a selected horizon over a wide area, or of the succession of faunas in a limited area, involving field-work; 18, General Geology, a special course for the civil engineers.

Among the many collections received by the economic museum the following are the larger ones: A full series of gold ores and associated dike rocks, Bingham Canyon, Utah, by Professor Kemp; iron ores from the Messaba and Vermilion ranges, by J. T. Hendrickson; gold ores from Klondike and from the Treadwell mines, by Mr. Bowles; a fine series of Cinnabar ores from Terlingua, Texas, by Dr. W. P. Jenney; a series of copper ores from Gold Hill, North Carolina, by the Union Hill Mine Co.

The petrographical collections have received an excellent series of the characteristic igneous rocks of Bohemia.

The following models were purchased by the Geological Department: The Dr. F. Krantz series of models illustrating folding; model of Vesuvius; the Cornwall iron mine, Pa.; Blair, Bedford and Huntington Cos., Pa.

The palæontological museum received, during the past year, many large collections of fossils, etc., among which the following are the most important: Hamilton fossils from Thedford, Ont., and from Michigan, by Professor Grabau and Mr. Shimer; Hamilton and Niagara fossils from eastern Wisconsin, by Professor Grabau; Lower Devonian fossils from near Port Jervis, N. Y., by Mr. Shimer; Lower Devonian fossils from Becraft Mt., N. Y., by the Summer School of Geology; Cretaceous fossils from Cerrillos Mountains, New Mexico, by Mr. D. W. Johnson; many fossils, especially to fill up gaps in the collections, came by purchase from Ward and Frazar. In addition to these, a very complete collection of crinoids, chiefly from Burlington, including many unique and valuable specimens, has been deposited in the Department. The Van Nostrand collection of modern mollusca has been transferred to the care of the Department and has been partially installed in wall cases. Several special fossil collections have been gotten together for the larger classes in stratigraphical geology and palæontology. The large saurians and casts have been put in place upon the walls of the museum. Most of the palæontological and stratigraphical books have been transferred to the palæontological library in room 101. The Department is in need of many German, French and Italian memoirs. Contributions numbered 81 to 85 inclusive from the Geological Department have been distributed.

All the different members of the Department were occupied during the summer with geological investigations in different parts of the United States. In the spring Professor Kemp delivered a public lecture in the University on Volcanoes. Professor Grabau read two papers before the A. A. A. S. which met in Pittsburgh in July: "Notes on Gastropods" and "*Spirifer mucronatus* and its Derivatives."

Summer Schools.—The eastern branch of the Summer School in Geology was held this year at Hudson, N. Y., from June 2 to 9. The work was in charge of Professor J. F. Kemp and

Professor A. W. Grabau, assisted by Mr. H. W. Shimer. Becraft Mountain, near Hudson, was chosen for the summer on account of its combining good stratigraphical, palæontological and structural features. The base of the mountain is, in most cases, composed of Hudson River shales; upon which rests unconformably the Manlius limestone, and upon this all the members of the Lower Helderberg rocks. The significance of the great unconformity at the base of the Manlius was especially impressed upon the students by their work in this field. Seventeen students attended the school. Several students from the more advanced classes in geology undertook a careful study of the faunas of the Helderberg and Oriskany beds, devoting all their time to careful collecting from and notation of exact horizons. The rest of the class was divided into pairs, each of which made a cross-section of the mountain and mapped a section areally. Every evening a geological conference was held at which each squad made a report upon their day's work, the conclusions they had reached, their reasons for them and the difficulties they had encountered. This enabled each one to keep in touch with the work of the others. As in previous years each squad will prepare a full report with maps, sections, photographs, etc.

The regular work of the second session in field geology for students in the School of Mines was conducted by Professor Kemp at Bingham Canyon, Utah, during the week beginning July 13. A geologic map of the region around the principal mines was prepared by a class of fifteen, and observations were also made underground. In connection with this each pair of students will make a petrographical and chemical examination of the different rocks and ores found in the field.

Department of Mineralogy.—The continued increase in number of students attending courses in mineralogy has had its disadvantages. To a very large extent, however, these unsatisfactory features have been removed by the creation of the new position of Tutor in Mineralogy and by the very extensive duplicating of student collections, a timely donation by Mr. C. F. Cox making possible the arrangement and labelling of some six thousand duplicates drawn from the Egleston Mu-

seum. In addition to these improvements Room 516 Schermerhorn has been equipped as a new lecture room, so that divisions may be instructed in this room and in the older room 106 at the same hour.

The Department is still embarrassed by the lack of enough microscopes for the Course in Optical Mineralogy in which the attendance has steadily increased in the past five years from 15 to 60. Mr. F. A. Schermerhorn has given recently a sum of money with which more microscopes will be secured.

The officers of the Department are pushing forward their design of preparing text-books covering all phases of mineralogy and crystallography. Three such text-books have been issued since 1895 and have met with a gratifying reception. Last year in this connection Professor Moses and Dr. Rogers brought out a paper developing a method for determining the geometric constants of crystals, and this year Dr. Rogers is studying methods of graphic solution, while Dr. Moses is making the first draft of a review of the genesis of minerals. Mr. McCord is also preparing slides and other material illustrating the relative availability of microchemical tests for student work.

Dr. Austin Flint Rogers, for two years University Fellow in Mineralogy, has been appointed to the new position of Tutor in Mineralogy.

Department of Physics.—Mr. C. R. Fountain, B.S., University of Oregon, and last year graduate student at Columbia, has been added to the staff of the Department, becoming special assistant to the professor in charge.

The wisdom of opening the laboratories during the Summer Session to advanced students engaged in research has again been demonstrated, since advantage was taken by a number of students of the privilege of carrying on laboratory work of a more advanced character than that covered by the lectures. These students were mainly instructors from other institutions, who desired to start or continue investigations, and who found Morningside Heights not an uncomfortable place, even in July. Six public lectures were given by members of the Department during the Summer Session, three by

Professor Hallock on "Wave Motion and the Ether," and three by Dr. Tufts on "Molecular Physics." The attendance on the regular courses reflected the general growth of the Summer Session.

Mr. C. T. Rogers has been secured as Department mechanic, and having entered upon his duties in July, has accomplished much in the way of repairing and making apparatus and laboratory adjuncts. The photographic dark room has been extended into an adjoining dark room, and new shelves, sink, and cases for photographic materials and chemicals have been put up in it, so that not only can ordinary developing be done in it but also tests of sensitized preparations and emulsions may be carried on. Dr. Chas. Forbes, honorary assistant, who has done considerable experimental work for the Eastman Kodak Co., expects to continue here his work, with special reference to color photography. The optical laboratory for undergraduates, which is on the basement floor, has been rearranged so as to get the benefit of the light from all the windows, thus making the main part of the room lighter and more cheerful, while for spectrometer work a dark room has been partitioned off on one side of the laboratory. A small chemical laboratory, in which acids and reagents may be used without risk of damaging physical apparatus is an important, if not absolutely necessary adjunct of a physical laboratory. To supply the need of such a place, a basement room which had formerly been used as a store room has been turned into such a laboratory and furnished with suitable desks, shelves, and cases for reagents, which change will greatly facilitate chemical operations.

Professor Rood, shortly before his death, added to his collection of standards by the construction of nearly fifty of his manganese dioxide units, which have proven so satisfactory for resistance greater than a thousand megohms. An experimental apparatus for wireless telegraphy has been designed and constructed by Dr. Forbes, who has used it in a very interesting series of experiments with "decohering" coherers. To him also is due an exceedingly convenient apparatus for photographing instruments or drawings and for making lantern slides. Another quadrant electrometer has been provided for the use of gradu-

ate students in studying radio-activity and atmospheric conductivity.

The enforcement of the new and stricter entrance requirements at the College of Physicians and Surgeons has resulted in a much better prepared class in laboratory physics, which now compares very favorably with the College and Applied Science classes. The change in the College curriculum, which separates the students beginning physics from those who have had some preparatory work, has had the much desired effect of rendering the classes more homogeneous and admitting a better adaption of the work assigned them.

Department of Zoölogy.—The American Museum of Natural History is now well established as one of the research centers for Columbia graduate students, and the well-arranged collections in palæontology and anthropology are attracting a constantly increasing number of investigators. The appointment of Prof. H. C. Bumpus, of Brown University, as Director of the Museum has not only led to still closer coöperation between the Museum and the University, but promises to add a greatly enriched department of invertebrate zoölogy. Professor Bumpus as Curator of this department has already secured some very able assistants as preparators and investigators, and before many months a very attractive new hall devoted entirely to marine and fresh-water life will be opened.

The third floor, east wing, is now being put in order for all the collections of fossil reptiles, fishes and amphibians, especially for a superb collection of dinosaurs and the unique series of ancient amphibians from the Permian of Texas. This hall will be especially valuable for students in Course V, on the Evolution of the Vertebrates. A deposit of part of the famous Newberry collection of fossil fishes in the Museum is contemplated, and is strongly favored by President Butler, but the arrangements for the proper care and exhibition of this collection have not yet been made.

Another city institution that promises to be of value to the zoölogical department is the New York Aquarium, hitherto only a popular natural history resort. The City offered the care of the institution to the Zoölogical Society, of which Professor Osborn is chairman, and upon October 31 the legal

transfer of the management took place. Park Commissioner Wilcox represented the City and Professor Osborn the Society. Dr. Charles H. Townsend made a brief inaugural address, in which he outlined as part of the programme of his administration a closer affiliation with the school, and opportunities for a certain amount of original work upon living material. Professor Dean, of Columbia, has been appointed one of an advisory committee of five.

Professor Wilson passed the entire summer in zoölogical researches in the field, the first half of the season at the laboratory of the U. S. Fish Commission at Beaufort, N. C., the latter half at the Marine Biological Laboratory of Tufts College on the coast of Maine. A large amount of material for instruction and research was collected, and Professor Wilson's own researches in experimental embryology and cytology were very successful. Material was procured for further extended research on the embryology of a number of invertebrates, including specially a complete series of the developmental stages of the colonial polyp *Renilla* and of the nemertine *Cerebratulus*. The most important part of the work consisted in a study of the phenomena of merogony in this form, which has proved one of the best objects thus far found for experimental investigation. Many experiments were also made on hybridization and regeneration in a number of marine animals.

During the past few months Professor Osborn has continued, with the aid of Dr. McGregor, the preparation of the hand-book on the "Evolution of the Vertebrates." He has nearly completed the memoir on Titanotheres for the U. S. Geological Survey and has published, with the coöperation of Dr. Lawrence M. Lambe, a memoir on the "Mid-Cretaceous Vertebrates of the Northwest Territory." His other studies have been chiefly upon the evolution of the proboscidea. In this and especially in the titanotheres memoir he is ably assisted by Mr. W. K. Gregory (Columbia B.A., 1900), who made a special trip to the British Museum in London to study the types there.

The explorations for fossil horses, especially to determine the mode of evolution of the horses in America and their rela-

tions with the horses of Europe and Asia, have been energetically pushed forward by the aid of a fund given by Mr. William C. Whitney. A course of lectures on this subject is in preparation for the University.

Professor Dean continued his investigations on the embryology of the primitive shark-like fish, *Chimæra*, and remained in the city during the summer in the hope of completing a memoir upon this form. He has recently prepared, for the United States Fishery Commission, an illustrated report upon the Japanese methods of oyster culture, about which there is at present considerable economic interest in connection with the development of the shell-fish industry on the Pacific coast. Dr. Dean had the opportunity of examining the matter at first hand during his sabbatical year, and he states that the Japanese system of raising oysters on brush (bamboo) yields astonishing results in producing many oysters on small areas. He believes that it compares favorably with the culture of oysters on tiles, which he has examined on the coast of France and Holland.

Dr. Calkins has recently published a series of papers dealing with the problem of the life-cycle of a protozoön, *Paramæcium*, whose generation he has followed in an uninterrupted line during the past two years. He has also published in the *Bulletin of the United States Fishery Commission* an illustrated memoir on the Marine protozoa of Woods Hole, and a further memoir on the protozoön nucleus in Schaudinn's *Archiv*. Dr. Calkins continued his researches during the summer at the Woods Hole station and at Cambridge.

Dr. McGregor has completed his studies on the Belodont reptiles and will publish them during the present winter as a memoir of the American Museum of Natural History.

Dr. C. Alfred Lawrence, who has been working for several years with Dr. Strong in the neurological laboratory of the Department, has recently taken the prize of \$500 given by the Alumni Association of the College of Physicians and Surgeons for his "Studies upon the cerebral cortex in the normal human brain and in dementia paralytica," prepared as a thesis for the degree of Ph.D.

TEACHERS COLLEGE

Teachers College has entered upon the new year under most encouraging conditions. The registration of students continues to show a satisfactory increase in numbers and an improvement in quality as indicated by their previous preparation; the expansion in the number of courses offered, determined upon last year, has been justified by the support given by student registration and it has been found necessary to supplement this expansion by the formation of a number of new courses; the equipment of the college has been improved by a number of important though minor changes, and its resources increased by the largest single gift that has ever been made to the college and that devoted to the greatest need of the college—a permanent endowment.

The total registration of the college proper on October 15 was 539 as compared with 470 of the same date last year. At the same date the registration of extension students was respectively 350 and 285. On November 7 the registration of the college, including 73 registered primarily under other faculties, was 636. The most notable increase has been in the collegiate course and in the departments of Domestic Art and Manual Training. The marked decrease in graduate students is apparent rather than real, and is due to the new basis of classification of the candidates for master's and doctor's diplomas in place of the old secondary and higher diplomas. The present attendance of the Horace Mann School is over 950, of whom 400 are in the High School. The High School, as well as several of the grades, now has a waiting list, notwithstanding the fact that the capacity of the school was doubled when the new building was occupied last year.

The Dean's report for the past year shows a total collegiate enrollment of 709, an increase of 20 per cent. over the previous year; while the total enrollment, including 900 extension students and 842 pupils in the Horace Mann School, was 2,451. Of the College students, 222 were college graduates, 77 had had a partial college course, and 191 were normal school graduates before entering Teachers College. The graduates of secondary schools who entered the professional courses be-

cause of having had special technical training or experience in teaching, numbered 165.

These facts exhibit strikingly the recent growth of the College. Five years ago only 30 students were college graduates and only one of these was a regular student pursuing a course leading to a diploma. During the same period the number of students with previous normal training has grown from 6 to 191, while the number of students admitted to special courses because of irregular preparation has fallen from 61 to 52.

The analysis of the class registration is no less interesting, both for the showing it presents of the professional work and of the nature of and demand for the collegiate work preparatory to the professional.

The total class registration in regular College courses was 2,833, as against 2,542 in the previous year. There were offered during the year under review 40 courses in Education which were attended by 1,276 students and 72 courses in other departments attended by 1,626 students. Moreover, 58 courses in Columbia University and 42 courses in Barnard College were attended by 126 and 81 Teachers College students, respectively. Approximately 45 per cent. of the total class registration were in the courses in Education, 32 per cent. being in the general courses in the history and philosophy of Education, educational psychology and the theory and practice of teaching. Two courses in biology, two in English, three in French and German, two in history, one in mathematics, and two in physics and chemistry, were closely allied to similar courses given in other departments of the University, but only those in French and German were strictly parallel. The remaining academic courses, sixty in all, have no parallel in any other University department. Less than three per cent. of the work, therefore, can be said to duplicate work done elsewhere in the University.

The number and character of the positions accepted by the students of the college during the past year in comparison with previous years also indicates an extension of its influence. During the past year 580 direct requests for teachers were received by the College as against 320 during the previ-

ous year. The number of positions to which Teachers College students have been appointed, or to which they have returned after leave of absence, is 201 as against 127 of the previous year. These were distributed as follows: Colleges and universities, 14; normal schools, 11; superintendents of schools, 3; supervisors and special teachers, 38; secondary schools, 91; elementary schools, 44; kindergartens, 11; other positions, 14. Names counted twice, 25.

One of the most gratifying evidences of the influence of the College is the relation to the educational movement in the South. Dean Russell has attended the meetings of the Southern Educational Conference for several years past and has accompanied those interested in this movement in their annual tour through the Southern States. By this means the College is kept in close touch with the educational conditions of that region. Last year nine scholarships for the benefit of southern teachers were given to the College, and as a result of that experiment the number has been increased to 18 for the present year. The donors of these scholarships are Messrs. John Crosby Brown, V. Everit Macy, George Foster Peabody, and the General Education Board.

Of the educational changes of the new year, the most important are those incident to the revision of the courses of instruction and the new regulations for graduate work that were described in the March number of the *QUARTERLY*, and were put into operation with the opening of this scholastic year. The changes have fully justified themselves and the decrease in graduate registration that has followed is only an apparent one due to a better classification from the professional point of view. Several courses have since been formed and tend to the completion of the general scheme and to broadening the work of the College. A course in Agricultural Nature Study is being given by Professors Woodhull, Dodge, Lloyd, Dr. Bigelow and special lecturers. This course is designed particularly to meet the needs of the Southern schools, where some instruction in agriculture is coming to be considered a necessity. The practical side of this work will probably be done in coöperation with the School of Practical Agriculture and Horticulture at Briarcliff Manor. A

course on "The Modern Interpretation of the Old Testament," given last year as a series of lectures, is expanded this year to a regular two-point credit course. It is the intention of the college authorities to make this a basis of a more expanded work in religious instruction, with the hopes of exerting some influence towards the reintroduction of the study of the Bible in some form in the public schools, or at least for securing some wider recognition of the importance of the religious element in modern education. A course on the Theory and Practice of Teaching French in Secondary Schools, and a similar one relating to German, are being given by Dr. Leopold Bahlsen of Berlin. Dr. Bahlsen is one of the leading representatives of the movement in Germany for "reform" methods in teaching of modern languages. After obtaining his degree from the University of Berlin, he was appointed official examiner in these languages. Besides being connected with a number of higher schools in Germany, he has conducted at the University of Greifswald highly successful courses in methods of instruction in foreign languages before many teachers from Germany, England, Scandinavia and Russia. The essential characteristics of his methods are to acquire only a necessary modicum of grammar; to demand constant practice in speaking and to insist upon careful pronunciation, according to the principles of scientific phonetics. Professor Edward H. Castle, of the History Department, has been given a year's leave of absence. During his absence the courses on the Theory and Practice of Teaching History are being conducted by Professor Lucy M. Salmon, of Vassar College, who is in attendance at the College on Wednesdays and Saturdays. The work of Professor Salmon in relation to history teaching in this country is too well known to need any comment upon the character of the courses given. The subject matter courses given by Professor Castle are in charge of Dr. A. C. Howland. A new course in the Elementary Study of Music for Kindergarten and Primary Teachers is also announced.

The importance of the work of the College in the departments relating to the more practical aspect of education are indicated by the activity in these departments. The demand

made last year for teachers in the Domestic Science and the Manual Training departments was much larger than could be supplied; while this year's registration in each department is larger than ever before. The Dean, in his annual report, calls for a special building to be devoted to the uses of the Domestic Science Department.

Professor Mary Schenck Woolman, of the Domestic Art Department, has been chosen Director of the new Manhattan Trade School for Girls, which is located at 233 West 14th Street and was opened November 3. This is looked upon as a part of one of the most promising educational movements of the times, so far as great masses of the city population are concerned, and the city school system is committed to the establishment of a similar school as soon as practicable. The University authorities approved this division of interest on the part of Professor Woolman, on the grounds that it was the duty of the University to coöperate with practical and philanthropic movements in the city, and that it was the express motive emphasized in the establishment of Teachers College to further such practical aspects of education. Professor Woolman devotes half of her time to the new movement and is assisted in her collegiate work by Miss Helen Gray Noble and Miss May B. Vail, formerly of Tome Institute. Professor Alfred Vance Churchill, of the Art Department, is giving a course of twenty lectures on "Art Interpretation and Criticism" at Johns Hopkins University, which is practically a duplicate of Fine Arts 3, as given in Teachers College. The course is meeting with great appreciation, the attendance being about 400.

The general equipment of the institution will be notably increased by the completion, this present month, of the building for the Speyer School. This building is even more extensive and elaborate than was first conceived, but by the generosity of Mr. and Mrs. Speyer the plans as formulated by the architect will be carried out at an additional expense of \$25,000. It is hardly probable that the School can be put into full operation before mid-year, but the new building will afford relief to conditions in the present school that have become well-nigh intolerable.

The erection of the new Physical Education Building, to be erected from the gift of \$250,000, which was announced in the June issue of the *QUARTERLY*, has been postponed owing to the condition of the labor and the building material markets. Excavation for the foundation has been almost completed.

In connection with the financial resources of the institution, the greatest encouragement has come. Lack of space unfortunately forbids even a summary of the statement of the financial condition of the institution made by Dean Russell in his annual report.

The gifts received during the past year have amounted to \$260,472.40, and \$392,700 have been pledged for specific purposes. The most important are \$250,000 from a friend and supporter during many years for a Physical Education Building; \$175,800 from Mr. and Mrs. V. Eyerit Macy for the increase of our endowment funds, and \$98,709.42 for the completion of the Horace Mann School; \$25,000 from Mr. and Mrs. James Speyer for the Speyer School; \$12,500 from Mr. George Foster Peabody for a lot east of the College; \$2,500 from the estate of Mrs. Peter M. Bryson for the endowment of the Tileston Scholarship, and upwards of \$69,000 through our trustees for general purposes. All of these gifts, with a single exception, have come from persons who are or have been trustees of the College. Indeed, of the \$2,712,823.11 which have been given to the College since its incorporation, all but about \$300,000 have come from trustees or their immediate relatives.

The greatest weakness in the whole financial situation lies in the fact that the income from endowment in 1901-02 was \$12,605.82, or *less than five per cent. of the current expenses*. The earnings of the year, mostly from students' fees, were over 68 per cent. of the current expenses. The most imperative need of the future is an endowment of \$3,000,000 to duplicate the capital which our students provide.

During the first month of the new year a great step towards meeting this need has been taken. On the 23d of October the announcement was made that Mr. John D. Rockefeller had offered to give the College the sum of \$500,000 as a thank offering. The payment of the full amount, however, is con-

tingent upon the payment of all outstanding debts, which amount to \$190,000, and the raising of an additional \$250,000 for endowment from other sources. One half of the gift will be available as soon as the debts are paid, and the other half in instalments of \$25,000 whenever an equal sum is received from other sources. Within two weeks after the gift was announced \$55,000 of the debt were subscribed, and it is believed that conditions for receiving the entire sum will soon be complied with. The gift is of significance for the College, not only for its intrinsic value and because it is the largest single gift ever received, but also in the fact that it comes from a source altogether outside of those who have hitherto supported the work of the institution so generously.

BARNARD COLLEGE

Department of Chemistry.—The Department of Chemistry has new quarters in the fourth story of Fiske Hall. The space devoted to the chemistry laboratories has thus been much increased. General inorganic, qualitative and quantitative, organic, and physical chemistry have severally well-equipped and pleasant laboratories. An abundance of hoods of the best pattern, besides soapstone and porcelain-lined sinks, soapstone tops for the desks and cement floors, has added much to the comfort, neatness and safety of the laboratories. For all the courses offered the equipment is satisfactorily complete.

There are also facilities for graduate work in organic and physical chemistry. In the former the course is given for the first time this year.

The general inorganic chemistry—course 1—has this year been changed from a four-point to a three-point course in order that it may occupy the same time as the first-year courses in the other natural sciences. The number of students in the Department of Chemistry is over four fifths larger this year than last.

Department of Classical Philology.—Professor Earle and Professor Knapp presented papers at the meeting of the American Philological Association at Union College in July. Professor Earle was elected one of the vice-presidents of the Association

for 1902-3. Mr. H. J. Burchell, Tutor in Classical Philology, has been granted a year's leave of absence. His Greek classes have been placed in charge of Dr. J. D. Rogers, his Latin classes in charge of Dr. G. N. Olcott.

Department of Romance Languages and Literatures.—A new course in Italian (VI) is given for the first time this year. It will be given hereafter every three years in rotation with Italian II and III. There are twenty students in attendance in Italian VI, and eleven in Italian I. There are also eleven students in the course in Spanish IIa. The Italian work is conducted by Professor Speranza, and the Spanish by Mr. Fitzgerald.

The extra fourth hour which is provided this year in French II for the first time for students admitted to the College on the Intermediate French examination is taken by ten students. The total registration in the Department at Barnard College this year is one hundred and eighty-one.

Department of Zoölogy.—The Department of Zoölogy has extended its work by the addition of a course in Physiology, comprising two lectures and four hours of laboratory work throughout the year. A new laboratory has been fitted up in Milbank Hall, and an adequate working equipment of electrical and other apparatus has been obtained, thanks to the interest taken by Mrs. Henry F. Osborn and Mrs. F. S. Lee. That the establishment of this course was timely is shown by the fact that twelve students were registered for it at the beginning of the year.

Four students of last year's classes, Miss M. E. Clark, Miss M. A. Johnson, Miss Elsbeth Kroeber, and Miss Ruth Earle, were awarded departmental scholarships entitling them to pursue a course of study during the summer at the Marine Biological Laboratory, Woods Hole, Massachusetts. Professor Crampton also spent the summer at Woods Hole, continuing his experiments upon variation and selection in Lepidoptera, and acting as an instructor in the course in Embryology. Mr. Kellicott, after returning from a collecting trip to Florida during the early part of the summer, continued at the University, until his departure for the West in August, his investigations upon the development of *Ceratodus*.

THE FINE ARTS

School of Architecture.—The first year of the School under its new and independent *régime* has opened in a most promising fashion, with an entering first-year class of twenty-seven, of whom seven are college graduates, besides one or two who have taken partial courses in college. The majority of the college men are taking advance courses and will complete the curriculum in three years. The average quality of the class is excellent, and the work of the year has begun auspiciously. There are, in addition to these twenty-seven, seven students from Columbia College taking a portion of the first-year courses. There are ten special students, three of whom are new students, and one post-graduate student in Advanced Design. The total registration in architecture, not including the seven "outsiders" taking partial courses, is eighty-three against eighty-six last year: but the entrance of additional special students will doubtless bring up the total by the end of the year to the same number as last year, or a greater number.

The anniversary celebration in honor of Professor Ware's twenty-one years of service as organizer and professor in charge of the School is described on another page. The exhibition at Fifty-seventh street of school work, selected chiefly from that of the past two years, was surprisingly full and interesting, and was impressive both by its amount and quality. It comprised one hundred and sixty stretchers, some of them of large size and mounted with eight or ten drawings each, representing every department of design and drawing in the curriculum of the School. One frame containing vacation sketches in water-color, attracted particular attention, and the fourth-year and thesis designs of recent classes, and the work in decorative design in illustration of the courses in the History of Ornament, were also greatly admired. For the first time the work of a post-graduate student in advanced design figured in the exhibition. Professor Ware has prepared a catalogue of the exhibition, which will be of permanent value as a record and announcement of the work and methods of the School.

Professor Ware has been conducting the competition for the Utica Court House, as consulting expert. Last year he conducted the very successful competition for the Utica Public Library. The winner in this competition, Mr. A. C. Jack-

son, was one of the earliest special students of the School. Professor Hamlin and Mr. V. C. Griffith, of the class of 1890 in the School, are the professional advisers to the Armory Board for armories to be erected in Brooklyn, and Professor Hamlin has recently brought to a successful conclusion the competition for the Danforth Library building in Paterson, N. J. He is delivering in the Brooklyn Institute a course of lectures on Architecture in Holland, Belgium, Germany and Spain, having also given an earlier lecture at the same place on *l'Art Nouveau*. He has lectured twice in the new course of public lectures in Havemeyer Hall on the Fine Arts. Other officers of the School who are to lecture in this course are Professor Ware and Mr. Kress. Mr. Hornbostel is consulting architect to the Municipal Bridge Commission, and has prepared the designs for the architectural treatment of both the new East River Bridges which are shortly to be undertaken, known as the Williamsburg and Blackwell's Island bridges.

Professor Ware's treatise on the Orders of Architecture, originally published in the *American Architect* and for some time used in sheet form in the class work in the *Elements of Architecture*, is about to be published as a text-book under the title of *The American Vignola*. Its combined simplicity and thoroughness, and the excellence of the illustrations prepared for it by Mr. W. T. Partridge, Lecturer in Design at the School, have already created a wide demand for it.

THE LIBRARY

On the week ending November 15 the Library gave a small but interesting exhibition of medieval manuscripts, in the Bibliographical Room. The room was open from ten to twelve a. m., and from two to four p. m. each day, only twenty-two hours in all: yet in this short time six hundred and sixty-two visitors availed themselves of the opportunity thus offered.

Besides the manuscripts owned by the Library, very interesting illuminated missals and other manuscripts were loaned by Rev. Dr. Morgan Dix, Mr. Wouter Nijhoff, Mr. F. M. Warburg, and Mr. Simkhovitch, the bibliographer of Columbia's Library. The earliest manuscript was a tenth century Codex of *S. Hieronymi Vita Pauli Heremitæ*, owned by the Library. The thirteenth cen-

tury was represented by five manuscripts, one of which is a Minuscule Bible, written on the thinnest vellum, also owned by the Library. The most remarkable of these thirteenth century manuscripts was a Picture-Bible loaned by Mr. Nijhoff. It was executed in 1260 in southern France, and contains 124 full-page illuminations, illustrating scenes from the Old and the New Testament. The pictures were painted in the most primitive way in gold and colors: and though far from beautiful in the modern and artistic sense, they were very interesting from a historical point of view.

Visitors had an opportunity to see not only the development and paleographic difference of the writing but also the development of medieval miniature painting and illuminating from the rude beginnings of the tenth century to the superb work at the end of the fifteenth and the very beginning of the sixteenth centuries. The use of the superlative is justified, because this exhibition contained some matchless specimens. Mr. Nijhoff's fifteenth century "*Liber himnorum*" is a *chef-d'œuvre*: and the superb Book of Hours, bequeathed to our Library by the late Stephen Whitney Phoenix, is a treasure of which we may justly be proud. In all about fifty manuscripts were exhibited, of which twenty-four were remarkable for their illuminated borders and miniatures. In addition, about forty Babylonian bricks, dating from about 2700 to 2400 B. C., were shown.

The students were much interested in the exhibition, the educational value of which cannot be doubted. The Library therefore intends to give a series of interesting exhibitions, which will begin as soon as Room 307 can be properly equipped with the necessary exhibition cases.

No better proof can be given of the successful and efficient organization of the Library, and of the competency and faithfulness of the members of the staff, than the very satisfactory management of all Library matters during the recent prolonged absence of the Librarian. No deputy librarian was appointed, each supervisor being left in absolute control of his or her special department. So harmoniously did all work together, so skillfully was each task performed, so faithfully was each duty discharged, that the three months passed without a single instance of friction, misunderstanding, or serious error of judgment. Indeed, an outsider was scarcely aware of the absence of the chief: and upon

his return it took but a single week to clear away all arrearages of correspondence and all accumulated business. Officers and students are warm in their expressions of satisfaction, and the staff is correspondingly happy.

C. Alex. Nelson, Reference Librarian, received during the past year the award of honorable mention for his exhibit of The Astor Library Catalogue (compiled and edited by him) at the Pan American Exposition, at Buffalo, and also at the South Carolina Inter-State and West India Exposition, at Charleston.

The increase in the enrolment of non-professional graduate students has been unusually large this year, and the following figures as of December 10, 1902, will be of interest :

Students registered in :	L. L. M.	A. M.	Ph. D.	Special.	Total.
<i>Political Science.</i>	4	117	62	22	205
Regular Students	—	49	50	12	111
Seminary Students	—	20	10	10	40
Law Students	4	48	2	—	54
<i>Philosophy</i>	—	187	144	9	340
Regular Students	—	107	98	9	214
Seminary Students	—	14	19	—	33
Teachers College	—	60	19	—	79
Law Students	—	3	—	—	3
Instructors	—	3	8	—	11
<i>Pure Science.</i>	—	46	42	5	93
Regular Students	—	25	26	5	56
Seminary Students	—	1	—	—	1
Medical Students	—	14	2	—	16
Applied Science Students	—	4	—	—	4
Instructors	—	2	14	—	16
Total non-professional Graduate Students.	4	350	248	36	638

SUMMARIES OF UNIVERSITY LEGISLATION

THE TRUSTEES, OCTOBER MEETING

The President presented his annual report for the year ending June 30, 1902, and the same was ordered printed.

The thanks of the Trustees were voted to the anonymous donor of the sum of \$10,000, given for the purchase of books for the Library; also to Edward D. Adams, Cornelius N. Bliss, John Crosby Brown, Mrs. Alfred Corning Clark, R. Fulton Cutting, W. Bayard Cutting, H. C. Fahnestock, Stuyvesant Fish, H. O. Havemeyer, Abram S. Hewitt, Morris K. Jesup, John S. Kennedy, Franklin B. Lord, Seth Low, D. O. Mills, Alexander E. Orr, Henry Parish, George L. Rives, John D. Rockefeller, Isaac N. Seligman, Jefferson Seligman, F. Augustus Schermerhorn, William C. Schermerhorn, Jacob H. Schiff, William K. Vanderbilt, Vermilye & Company, and to the estate of Henry Villard for their subscriptions to the interest fund for the year ending June 30, 1902.

A vote of thanks was also tendered to the several contributors of the fund of \$7,500, received through Mr. William H. Baldwin, Jr., toward the salary of a Professor of Social and Political Ethics in the University; to James H. Hyde and Frederick R. Coudert, Jr., for gifts of \$1,200 and \$100 respectively to the Fund for the maintenance of two international fellowships for study in France; also to Messrs. Wheaton B. Kunhardt, John Stanton and F. Augustus Schermerhorn, for their contributions to the special fund for the Department of Mining;

also to Miss Mary E. Merington for her gift to the Department of Physics of certain apparatus and supplies.

The President was authorized to accept the invitation of Princeton University to appoint a representative to be present at the inauguration of President Wilson; also the invitation of Northwestern University to appoint a representative to attend the installation of President James.

The President was authorized to tender an invitation to the members of the International Congress of Americanists, to make a formal visit to Columbia University during the period of their 13th Session, October 20-25, 1902.

The annual Report of the Treasurer for the year ending June 30, 1902, was presented and ordered printed.

The Treasurer was authorized to accept payment of the award for the widening of Gun Hill Road through the Williamsbridge property, and the Clerk was authorized to execute the necessary papers for releasing to the City the interest of the Corporation in the property so condemned.

The appropriation of \$500, for the salary of an Assistant in the Department of Mining for the year 1902-3, was made available for assistance in the department.

J. H. Kliene was appointed Assistant in Chinese for one year from July 1, 1902. The following appointments, all for the academic year 1902-1903, were confirmed: George W. Botsford, Ph.D., Lecturer in Ancient History; Bradley

Stoughton, B.S., Instructor in Metallurgy (vice W. A. Bentley); Hercules Wallace Geromanos, S.B., Tutor in Metallurgy; Clayton Meeker Hamilton, A.M., Tutor in English; Charles H. Ellard, A.M., Assistant in Analytical Chemistry; Claude Russell Fountain, A.B., Assistant in Physics; Frank E. Hale, Ph.D., Assistant in Analytical Chemistry; Charles R. Wyckoff, Jr., B.S., C.E., Assistant in Civil Engineering (vice Richard Erwin Dougherty, resigned); James Dennison Rogers, Ph.D., Lecturer in Greek.

Leave of absence was granted to Prof. Lucien M. Underwood, for the second half of the academic year 1902-3.

The appointment of an Assistant in the Department of Mechanics was authorized, at an annual salary of \$500, in addition to the provisions for the department made in the budget for the year.

THE TRUSTEES, NOVEMBER MEETING

A vote of thanks was tendered to Benjamin B. Lawrence, a graduate of the Schools of Applied Science in the class of 1878, for his gift of \$200 for an annual scholarship in the School of Mines for the year 1902-1903; also to William Underhill Moore, a graduate of Columbia College in the class of 1900, and of the School of Law in the class of 1902, for his gift of law books to the library of the University.

The President was authorized to accept the invitation of the Managers and Faculty of Swarthmore College, and to appoint a delegate to represent Columbia University at the inauguration of Joseph Swain,

LL.D., as President of Swarthmore College, on November 15, 1902.

It was ordered that a further edition of 5,000 copies of the President's Report be printed, together with such portions of the Reports of the Deans of the College and Law School as relate to the length of the college course, and a summary of the Treasurer's Report.

A resolution was adopted endorsing the statement of the financial needs of the University contained in the President's Annual Report; and appointing the members of the Finance Committee and the Treasurer a special committee to coöperate with the President in securing additional funds for the University.

The sum of \$250 was appropriated for the support of the School of Classical studies at Rome, during the current academic year; and the appropriation of \$500, for the salary of an assistant in the Department of Zoölogy for the year 1902-3 was made available for assistance in the Department.

Herman Knapp, M.D., was appointed Emeritus Professor of Ophthalmology, and Morton Arendt, Lecturer in Electrical Engineering for the academic year, 1902.

The appointment of Charles P. Weston as Assistant in Mechanics, was confirmed.

Leave of absence was granted to Henry J. Burchell, Tutor in Classical Philology at Barnard College for the remainder of the academic year, and James D. Rogers, Ph.D., Lecturer in Greek, and George N. Olcott, Ph.D., Lecturer in Roman Archaeology, were appointed in his place.

STUDENT LIFE

The various undergraduate organizations in the College have shown unusual activity this year, and the work of all the student societies is well under way. **King's Crown** has widened its scope and is now the representative society of the College. It is no longer solely the society of the Department of Comparative Literature, but is open to all students in the College except Freshmen. It was Professor Woodberry's intention when the society was founded, that this change should ultimately be made, and the time seemed ripe for it this year. Professor Woodberry accordingly tendered his resignation as vice-president, and a new constitution was adopted. Prof. Harry Thurston Peck is now the faculty vice-president of the society, and all members of the college faculty may become active members. Officers and students of the other departments of the University are eligible to associate membership. Two very successful social meetings have already been held and **King's Crown** bids fair to become the center of student life at Columbia.

Owing to the disbanding of the Musical Society and the financial difficulties which have encumbered the **Varsity Shows** of the past few years, there was little chance of any show being given this year after the old plan. **King's Crown** has therefore decided to present a show during the second week of February. The committee which was appointed to make arrangements for the show has decided to present a comic opera along the same lines as

the Varsity Show, provided that a suitable student opera can be obtained. Otherwise an old English or classical play will be given. With a society which represents the entire college behind it, this year's show should be an assured success.

The **Deutscher Verein** has begun another season with the same success that characterized the meetings of last year. The full limit of membership has been reached and there is a long waiting list. Some of the members recently took part in a performance of "Alt Heidelberg" at the Irving Place Theater, where they appeared as German students.

The **Société Française** has been reorganized and its membership has been largely increased. All officers of the French Department are now members. For the first time in its history the society will present a French play by its members alone. Heretofore the plays have been given in conjunction with the Barnard society. The play will be either Molière's "L'Avare," or "Le Bourgeois Gentilhomme," and will be presented at Carnegie Lyceum during the second week after Easter.

With the exception of *Spectator*, the **Papers** at Columbia are complaining of a dearth of candidates for their editorial boards. With *Spectator*, the successful change to a daily has brought increased circulation and influence which have been reflected in an unusually large number of candidates for the board. *Spectator* has been successful in chronicling the happenings about

the University while they were still news. The paper is in clear type and is much improved in quality and appearance. The *Literary Monthly*, although still conservative, is making several innovations, such as publishing a series of supplemental pictures of prominent Columbia men and articles by the editors of the literary magazines of other universities about the distinctive phases of college life at Harvard, Yale, Princeton, and Cornell. These tend to increase the popularity of the paper, while it still remains the center for expression of undergraduate literary ability. Its book reviews are especially commendable. *Morningside*, after a rather weak start, is gaining its old-time form, and in cover designs and verse does particularly well. *Jester* shows some real ability in its drawings and now and then a clever joke, fable in slang, or bit of verse; it suffers, however, from the insertion of poor material merely to fill up.

All last year's men are back and **Chess** affairs are in good condition. Matches have been played with the Brooklyn Chess Team, the Bishops Team, and against Lasker, the champion. In an informal tournament, Princeton has been defeated by a score of $7\frac{1}{2}$ to $2\frac{1}{2}$ and tie games have been played with Yale and Pennsylvania. By dint of hard practice, the team's chances of winning the intercollegiate meet with Yale, Harvard, and Princeton during the Christmas vacation can be rendered very good.

The **Debating Union** plans to have but one intercollegiate debate this year, which will be the culmination of a season's activity on the

part of *Barnard* and *Philolexian*. These societies are arranging debating contests with similar organizations in other colleges. *Philo* will probably meet the Dartmouth Debating Union at Hanover directly after the holidays. *Barnard* is arranging the date for a contest with a similar society from Williams. After these debates there will be the annual *Philolexian-Barnard* debate early in the spring term, and the season will close with an intercollegiate meet with Cornell. *Philo* has practically reached the limit of its membership and both societies are in a very flourishing condition.

The 1904 **Columbian** is promised for December 15. The book will contain several new features in illustration and make-up. The cover will be of leather on flexible boards, with divinity circuit edges. Antique deckle-edge paper will be used, with coated inserts for the half-tones. The dedication is not yet announced.

The **Classes** have begun the usual activities. The annual *Junior Ball* will be given just after the holiday vacation. The Senior class has thus far neglected the custom of senior singing on the Library steps, and no class affairs have as yet occurred. The Sophomore class will again present a professional play, entitled "A Glimpse of Paradise," during the week preceding the holidays. The Freshmen are showing considerable spirit and have a successful foot-ball team and a debating society.

All things considered, there is a gratifying increase of college spirit, and the outlook for a good year is very encouraging.

ATHLETICS

The athletic situation is not altogether satisfactory. The **Foot Ball Team**, in which the main athletic interests of the University are centered at this time of year, started out in an unusually encouraging way, but the results of the more recent games have been very disastrous. Following is the record:

Oct. 1, Columbia.....	20	Horace Mann.....	0
Oct. 4, Columbia.....	43	Rutgers	0
Oct. 8, Columbia.....	45	Fordham.....	0
Oct. 11, Columbia.....	5	Buffalo.....	0
Oct. 15, Columbia.....	24	Swarthmore.....	0
Oct. 18, Columbia.....	35	Hamilton.....	0
Oct. 25, Columbia.....	0	Princeton.....	21
Nov. 1, Columbia.....	0	Pennsylvania.....	17
Nov. 8, Columbia.....	0	Brown.....	28
Nov. 15, Columbia.....	0	Amherst.....	29
Nov. 19, Columbia.....	5	Annapolis.....	0
Nov. 27, Columbia.....	6	Syracuse.....	6
Total	183	Total.....	101

The **Fall Regatta** was one of the most successful held at the University in recent years. The weather was favorable. After a close race the Senior boat crossed the line two feet in advance of the Juniors. The Sophomores finished third with their boat not more than a yard behind the Juniors. In the Freshman race, the College crew defeated that of the School of Applied Science.

The **Golf Team** has entered no contests thus far, except the annual intercollegiate tournament. In that they were defeated by Harvard in the opening round, by a score of 16 to 1½ points.

In **Tennis** there was no regular tournament held this fall. The annual tournament with Princeton was won by the latter, Columbia taking one match in the singles and two in the doubles.

The **Swimming Team** inaugurated its season by winning two out of three events in the meet of the Knickerbocker Athletic Club. A number of Yale men were also entered in the contests. A. R. Camp and J. W. Spencer won the two events accredited to Columbia. Spencer also won the A. A. U. championship for the 1,000-yard race in a meet held on November 15, and established a new record. It is proposed to hold swimming races in the gymnasium tank on alternate Fridays throughout the season.

THE ALUMNI

The annual meeting of the home **Association of the Alumni** of Columbia College was held at Sherry's, 44th Street and Fifth Avenue, Monday evening, October 6, 1902. President Edward Mitchell, '61, was in the chair, and there were about two hundred and fifty members present. The Chairman of the Standing Committee presented the report of that committee, the Treasurer read his annual report, and the Secretary read the necrology of the year. The

officers and members of the standing committee elected at the meeting were as follows: Edward Mitchell, '61, President; Julien T. Davies, '66, Vice-President; T. Ludlow Chrystie, '92, Treasurer; F. P. Keppel, '98, Secretary. Members of the Standing Committee for a term of three years from October, 1902, C. H. Mapes, '85, Prof. Benjamin D. Woodward, '88, Frederick Coykendall, '95, and Ellery Oswald Anderson, '98. After the supper,

which followed the completion of the business before the Association, addresses were made by Nicholas Murray Butler, '82, President of the University, and J. Howard Van Amringe, '60, Dean of Columbia College.

At a meeting of the Standing Committee held on October 24, Prof. Edward Delavan Perry, '75, was elected delegate to University Council from the Association of the Alumni of Columbia College, for a term of five years.

A number of meetings of the **District of Columbia Alumni Association** were held during the latter part of the spring and were enthusiastically attended. Several new members have recently been elected, the roll-call now numbering forty-seven names. Letters of congratulation and good wishes have been received from President Nicholas Murray Butler and from Mr. John B. Pine, whom the association hope to have the pleasure of soon entertaining as their guests. At the annual meeting to be held on December 13, it will be decided whether or not an alumni banquet will be given this winter.

At the last meeting of the **Society of the Alumni of the Sloane Maternity Hospital** the following graduates of Columbia were elected officers: President, James D. Voorhees, '93 P. & S.; 1st vice-president, E. W. Belknap, '92 P. & S.; 2d vice-president, James Ewing, '91 P. & S.; recording secretary, A. M. Shrady, '93 P. & S.; corresponding secretary, John Douglas, '98 P. & S.; treasurer, H. E. Hale, '96 P. & S.; pathologist, D. S. D. Jessup, '94 P. & S.

Class of 1899 College

The Triennial Reunion of the class of '99, and the fifth reunion of the year, was held on the afternoon and evening of Commencement day, June 11. On the morning of that day at the Commencement exercises, a large number of '99 men severed a seven years' connection with the University, eight graduating from the Law School, and three from the School of Medicine. Only a few members of the old class still continue their studies at Columbia.

Upon the conclusion of the Commencement exercises, arrangements were made for the reception of the '99 alumni. The '99 Triennial Committee was composed of H. O. Mosenthal, Theophilus Parsons, Jr., M. Van Name, Ernest A. Cardozo and Frank S. Hackett. The '99 flag was hung from the portico of College Hall, and soon quite a number of the faithful were grouped around it, ready to join in the march to Memorial Hall for the Alumni Luncheon. '99 was exceptionally well represented at the alumni exercises in the afternoon, twenty-five members of the class being present. When the alumni meeting was over, the class adjourned to the room in College Hall, where refreshments were served to all comers.

About seven o'clock '99 assembled at the Arena, where the Triennial Dinner was scheduled to take place. Rarely has '99 sat down to a dinner which was more thoroughly enjoyable or at which better spirit was shown than on this festive occasion. Everything went off well; the old familiar tunes were sung in a pleasing fashion and the entire reunion was voted a great success. Among those present were: Hellman, Fort,

Corning, Bradley, Josephthal, Marcus, Hinck, Ernst, Cardozo, Staunton, Hackett, Smith, Tuttle, Moran, Lesem, Baker, Mosenthal, Simpson, McCann, Deane, Fletcher, Ehret and Harrison.

About 9:30 it was voted that the class proceed to the University and assist in '92's Decennial. A word of explanation in this connection is not only proper, but it is deemed fitting to record it here. The sole reason for '99's not being present originally at the '92 *Kneipe* was the fact that all its arrangements had been completed before '92's invitation was received. Next year '99 hopes to be represented as well as the other classes.

The '92 *Kneipe* was a striking innovation in Columbia reunions; and '99, as its speaker, Ernest A. Cardozo, tried to show in his few words of greeting to '92, not only was glad to share in the success of the decennial, but heartily congratulated '92 upon its anniversary and its past record. So the Triennial ended about midnight, after a day and evening of genuine enjoyment.

The present season has opened just as auspiciously. At the alumni meeting on the evening of October 6, '99 had a large quota of representatives, and their singing was quite a feature of the evening's pleasure.

The second assembly of the class for this year was held at the Brown-Columbia foot-ball game on November 8. Eighteen '99 men witnessed the game; at its end, '99 assembled at Pabst's, Harlem, where an informal dinner was served to those present. The same old spirit of '99 good fellowship was strongly in evidence. In the evening '99 had a box party, and attended the per-

formance at *Hurtig and Seamon's*; and at a late hour the fourth foot-ball reunion of the class was ended. Those who attended the reunion were: Ehret, Pell, Cardozo, Hinck, Wormser, Hackett, Lichtenstein, Moran, G. Parsons, Matthews, Corning, T. Parsons, Marcus, Mosenthal, Giffin, Josephthal, Bradley, Eldert, Deane and McCann.

The next reunion of the class, which is the '99 annual banquet, is scheduled for Friday evening, December 26.

Theophilus Parsons was married to Miss Florence Whitin at Northbridge, Mass., on the fourth of June last. Otto H. Hinck has announced his engagement to Miss Anna Moller, of 670 St. Marks Street, Brooklyn, N. Y., and will be married some time during the month of December. Montgomery Schuyler, Jr., has been appointed by President Roosevelt an *attaché* of the American Embassy at St. Petersburg, Russia.

Rev. Hugh McC. Birkhead graduated last spring from the Episcopal Theological School in Cambridge and is now a curate at St. George's church, Stuyvesant Square, in New York City.

Class of 1900, College

Nothing very startling can be chronicled of the class of 1900 during the past few months, unless it be the marriage of three of its members, Ralph E. Lum, Thomas Simons, captain of the 1900 'Varsity eleven, and Goelet Gallatin. The majority of the men continue to confine their attention either to the study or the incipient practice of law or medicine. The latest reports from the theological group dis-

close the fact that "Bobby" Hall is now an ordained minister, having recently preached from the same pulpit as his father, an incident made much of by an artist for one of the morning papers. Bogue and Knapp continue to interest themselves in athletics, Knapp having been one of the graduate coaches of this fall's foot-ball team, and Bogue being an alumni adviser of the baseball association. Boyesen, after a two years' sojourn with Mr. Brisben Walker at Irvington, where the *Cosmopolitan* is edited, has returned to the Law School. Thomas Whittaker has gone out of the Bible-selling business and is now reforming the heathen, together with Turner, Newborg, Schaefer, William H. Dixon and others, on Wall Street. Meeker, believing that cleanliness is next to godliness, is an agent for a firm dealing in wash-tubs. "Billy" Moore, the old-time benefactor of *alma mater*, has recently donated 500 law books to the university library. Gregory is still doing scientific work at the American Museum of Natural History; St. Clair is studying the way of the Indian, modern and ancient, at White Rock, Utah. Cane spent the summer reporting for the *Evening Post*, of which journal he is the Columbia representative. Kellock has abandoned journalism and is now a "lit'rery feller." Giddings and Ogden are both important factors in the success of the youthful *Columbia Law Review*, Giddings being its editor-in-chief. Strunsky is doing work for the forthcoming *International Encyclopædia*, published by Dodd, Mead & Company. W. C. de Mille has announced his

engagement to Miss George, the daughter of the late Henry George.

Class of 1901, College

The class of 1901, College, held its first reunion of the year on Saturday, November 15, at the *Arena*. Thirty members of the class attended and enjoyed a thoroughly delightful evening in renewing old friendships and talking over the old college days. The class has scattered far apart since graduation,—from Dayton, Ohio, to Switzerland, from New York to Baltimore, so that a large reunion could hardly be expected. But the plan of organization which was adopted at graduation has proved remarkably successful, and the men who once enter into the organization, are always to be counted on as regular attendants at the reunions. Three meetings during the year are found to be none too many, some of the members of the class even desiring more.

The dinner began at eight o'clock, and lasted late into the night. The President called upon Gray, the father of the class, to respond, and also upon Cardozo, Eastmond, Heuser, Brower, and Shoemaker. Upon motion by Cardozo the Reunions Committee was authorized to purchase and have suitably engraved a silver mug to present to the first "class baby," whenever a claimant might appear. With "six Columbias for 1901," and numerous songs the class reluctantly departed, to assemble again in the late winter.

The occupations of the members at present are as follows: Business, 23; Columbia Law School, 23; New York Law School, 3; law offices, 3; College of Physicians and Surgeons, 8; other medical schools, 2; dental

school, 1; school teachers, 6; graduate study, Columbia, 5; ministry, 3; actors, 2; Columbia faculty, 2; literature, 2; engineering, 2; instructor in dancing, 1; traveling, 1; music, 2.

Class of 1902, College

The class of 1902 had a reunion at the Syracuse football game last fall and will hold a dinner in December. A number of the men are scattered. Lawson is in Europe, Wilson taking his A.M. at Harvard, Hunting is doing the same at the University of California, where he is also an Assistant in the English Department. Langs is Instructor in Music at the University of Colorado. Lawrence, Kennedy, "Nort" Atkins and Merrill are teaching. Waters, Spence, Johnson, Hopkins, Ward, Shoemaker and a number of others are in business. A large number of the men have come back to Columbia for graduate or professional work. Sewall, West and Parr are in the School of Applied Science, Lockwood, Haas, Bigongiari, Smith and Ledoux are working for A.M.'s, Bartow, Colie, Gerster, Haberman, H. M. Hays, who published a book on Physiological Chemistry this summer, Hellman, Holland and Ottenberg are in the second year at P. & S., while Lieb, Oppenheimer and Spiegelberg are in the first year. In the law school are Bradley, A. J. Hays, Wylie, Clark, Schuster, St. John, Spencer, Buddington, while Kelly, Weeks, Iglehart and Jenkins are at the New York Law School. Our embryo ministers are Bancroft, Hannah, Winslow and Ford at the General Theological, Gookin at the Episcopal Theological at Cambridge,

while Willie Nesbit holds up Columbia's honor at Drew. Our first papa is Meeks, ex-1902. Wyman, also ex-1902, has been heard from; he is in Colorado for his health.

Miss Julia Marlowe will present on December 8, at the Criterion Theater in New York City, a dramatization of George W. Cable's popular novel, "The Cavalier," by Paul Kester and George Middleton. The latter is a graduate of 1902, and was, during his college career, prominent in its literary affairs. He was connected with the staffs of the *Spectator* and *Literary Monthly*, and was stage manager of the Varsity Show for the past two years.

General Notes

Among the candidates of both parties at the recent election in New York were many Columbia graduates. Governor Odell entered the class of '77 S., but left before graduating to manage a political campaign for his father. Alfred Steckler, nominee for Justice of Supreme Court, graduated from Columbia Law School in '77, and Vernon M. Davis, Tammany nominee for the same office, graduated from the same school in '79. The Democratic candidate for Justice of Municipal Court, Eighth District, James W. McLoughlin, graduated from the Law School in '82. Among the candidates for Congress were Montague Lessler; James W. Perry, '75 L.; Andrew J. Anderson, '90 P. & S.; Edward Swann, '86 L.; Charles T. Dunwell, '74 L.; Edward M. Bassett, '86 L.; and Townsend Scudder, '88 L. The candidates for Assembly and Senate included John Goode, '78 L.; John W. Russell, '76; Isaac N. Mills, '76 L.; Edward R. Finch,

'98 L.; William Brauns, '90; Charles F. Bostwick, '86 L.; John J. Neville, '76 P. & S.; Charles Wheaton, '97 C., '99 L.; J. Mayhew Wainwright, '84 C. and '86 L.; Edwin J. Chapman; John F. Bullwinkel, '75 L.; and William Seward Shanahan, '97. Of these Odell, Russell, Finch, Bostwick, Wainwright, Dunwell, Bassett, Bullwinkel, Shanahan, and Scudder were elected.

Chauncey Berrien, 1902 S., last year's captain and full-back on the Varsity, has this year been coaching the Hamilton College team.

Guy Wetmore Carryl, '95, has recently built a cottage at Swampscott, Mass., which he has called, in the characteristic vein of his "Fables for the Frivolous" and "Grimm Tales Made Gay," *Shingle Blessedness*.

Douglas L. Doty, '97 S., has left the McClure Syndicate to accept a position with the Century Company as reader and literary adviser.

Ferris Greenslet, Ph.D., formerly Fellow in English, is now assistant editor of the *Atlantic Monthly* in Boston.

William G. Low, Jr., 1900 L., is pursuing the general practice of the law at No. 31 Nassau Street, New York.

J. A. McAnerney, 1902 S., and W. H. Powers, 1902 S., have been taken into partnership by their former employer, W. Creighton Peet, constructing electrical engineer.

J. F. B. Mitchell, Jr., '98, has resigned his commission as first lieutenant in the U. S. A., and has entered the firm of Redmond, Kerr & Co. in Wall Street. Mr. Mitchell was with the 12th Regiment in the Philippines at the time of his resignation.

The Rev. C. W. Morrow, '76, of Norwich, Conn., has become a professor at Fisk University in Nashville, Tenn.

NOTICE: Hereafter all notices regarding alumni associations and notes of class activities will be published in the December and June numbers, an annual necrology will appear in the March number of each year, and in the September number will be given a *résumé* of student activities and of athletics during the preceding academic year. The Editors desire to make the QUARTERLY of increasing interest to the alumni, and contributions of graduate personals are earnestly solicited. All communications intended for this department should be addressed to the Secretary, Rudolf Tombo, Jr., at Columbia University.

STATISTICS

The following table, compiled by the Registrar, shows the registration in all departments of the University on November 7, 1902. The figures given for preceding years are also those of November 7 in each case. An examination of the table will show that there has been a steady increase all along the line, except in the case of the Faculty of Medi-

cine, where the advanced admission requirements have caused a considerable decrease in the size of the first year class. Since November 7 the number of extension students has reached 1,196, and the grand total of students, excluding all duplicates is now 5,352, and the total university influence 5,882.

Students registered in :	1898	1899	1900	1901	1902	Year's Gain.
<i>Columbia College</i>	387	446	464	481	485	4
Freshmen	129	106	124	141	157	16
Sophomores	89	113	95	102	85	— 17
Juniors	86	89	99	98	128	30
Seniors	55	93	88	94	70	— 24
Specials	28	45	58	46	45	— 1
<i>Barnard College</i>	202	223	292	328	345	17
Freshmen	43	54	82	99	92	— 7
Sophomores	36	38	51	73	79	6
Juniors	23	39	39	48	73	25
Seniors	24	39	52	50	49	— 1
Specials	76	53	68	58	52	— 6
Total undergraduates	589	669	756	809	830	21
Faculty of Political Science	85	118	109	142	150	8
Faculty of Philosophy	120	108	239	280	317	37
Faculty of Pure Science	57	53	64	54	57	3
Barnard College	76	71	*	*	*	*
Total non-professional graduate students	338	350	412	476	524	48
<i>Schools of Applied Science</i>	431	464	546	604	685	81
First-year	128	130	153	193	222	29
Second-year	106	114	132	156	184	28
Third-year	86	111	123	127	149	22
Fourth-year	75	69	99	91	87	— 4
Graduates	7	3	6	6	5	— 1
Specials	29	37	33	31	38	7
<i>Law School</i>	342	377	427	443	468	25
First year	132	166	172	165	182	17
Second-year	103	111	151	150	135	— 15
Third-year	106	99	100	126	129	3
Specials	1	1	4	2	22	20
<i>Medical School</i>	697	757	751	815	777	— 38
First-year	197	226	245	269	203	— 66
Second-year	162	159	190	199	205	6
Third-year	178	158	148	179	181	2
Fourth-year	140	173	147	148	171	23
Specials	20	41	21	20	17	— 3
<i>Teachers College</i>	196	317	448	557	563	6
First-year	18	42	24	17	43	26
Second-year	20	19	30	28	21	— 7
Third-year	46	80	93	141	155	14
Fourth-year	29	46	76	79	145	66
Graduates	51	92	127	162	83	— 79
Specials	32	38	40	19	54	35
Auditors and unclassified students			58	111	62	— 49
Total professional students	1666	1915	2172	2419	2493	74
Double registration †	—	—	105	136	120	— 16
Net total resident students	2593	2934	3235	3568	3727	159
Auditors	15	22	20	18	23	5
Students at Summer Session			417	579	643	64
Extension students, Teachers College ‡	470	750	721	420	535	115
Total	485	772	1158	1017	1201	184
Double registration || . . . . .	—	—	108	86	91	5
Grand total of students	3078	3706	4285	4499	4837	338
Officers	426	443	471	492	530	38
Total university influence §	3504	4149	4756	4991	5367	376

* From Oct., 1900, women graduates register under the University faculties.

† Includes candidates for University degrees and Teachers College diplomas.

‡ Extension students are held to full requirements of regular courses in T. C.

§ Includes Summer Session students who have returned for work this fall.

§ Excluding 941 pupils in Horace Mann School and 91 in Speyer School.

R. TOMBO, JR.



INSTALLATION OF PRESIDENT BUTLER

COLUMBIA

UNIVERSITY QUARTERLY

VOL. V—MARCH, 1903—No. 2

SHORTENING THE COLLEGE COURSE

OPINIONS OF THE FACULTIES

ON October 24, 1902, President Butler addressed to each professor and adjunct professor of Columbia University, including Teachers and Barnard Colleges, a circular letter inviting a free expression of opinion in answer to the following questions:

1. Should the basis for admission to the professional schools of the University, *i. e.*, Law, Medicine, Applied Science and Teachers College, be

- (a) The completion of a secondary school course,
- (b) The completion of a four years' college course, or
- (c) The completion of a shortened college course?

2. If you prefer 1 (c), to what extent should the college course be shortened?

3. Should any degree, or other academic designation, be granted for the completion of a college course less than four years in length? If so, what degree or designation?

4. Is the existing arrangement by which a College Senior may take the first year of a professional course and count it toward the degree of A.B. satisfactory as a permanent policy?

This letter has elicited 121 replies, and in all but four of these some at least of the above questions are answered. The

President, deeming it of interest to the University that the trend of faculty opinion should be known, but unable himself to make, as he had planned, a digest of this mass of correspondence, has entrusted to the QUARTERLY this important and responsible task.

In endeavoring faithfully to discharge this duty, we have been confronted with some difficulties. Not in every answer is the individual attitude of the writer unmistakably discernible. A frank statement that no opinion has been formed presents no difficulty; but some of the answers express opinions and yet leave room for doubting where the writers really stand. For example: a writer states or indicates that he prefers one solution of a problem, but would support, or accept, or refrain from opposing a different solution "as a compromise." In such cases we have regularly counted the writer as a supporter of the plan which he seems to prefer. If, however, a writer accepts as necessary a solution which he personally dislikes, we have regarded him as voting for that solution, since no one can be said to maintain a position which he confesses to be untenable and virtually evacuates. In construing these and other unclear answers, we have probably made occasional mistakes. Some of these mistakes may offset each other; in any event, they will not seriously impair the correctness of our summaries, because in the correspondence as a whole opportunities for misconstruction are relatively infrequent. The doubtful answers are exceptional. The same is true as regards confessed absence of formed opinion. Nearly all the replies are categorical and clear, although many are accompanied by saving clauses, *e. g.*, that the writer speaks with assurance only as regards his own school or department, or that his views may be modified by discussion.

In the endeavor to indicate the principal arguments advanced on either side of the questions propounded, a difficulty has been encountered which at first seemed serious. The President's letter did not specifically call for reasons, but for opinions; and in nearly half of the answers opinions only are

given. Some of the writers expressly state it to be their understanding that opinions only are desired; others say that they have refrained from setting forth their reasons lest the burden of reading so many lengthy replies should become intolerable. More than half of the replies, however, indicate or express the considerations which have led the writers to some at least of their conclusions. Many take as their point of departure the President's Report to the Trustees with its appendices, and either accept the arguments therein contained or briefly set forth the grounds of their dissent. Others, and not a few, send in practically complete briefs. On the whole, the replies which indicate or develop arguments are perhaps sufficiently numerous, sufficiently representative of all the different faculties, and sufficiently divergent in their conclusions to justify the assumption that the considerations on which the unexplained votes rest are probably all in evidence. In many instances the arguments which figure in every discussion of the college course are presupposed or merely suggested; experts writing to an expert do not feel obliged to develop familiar lines of thought; but it is easy, whenever it seems necessary, to fill out the sketch.

I

That a college course of two or more years' duration, or a course of two or more years in a scientific school of collegiate rank, or equivalent examinations, should be required for admission to all the professional schools of Columbia University (at least as regards candidates for the professional degrees) is the almost universal opinion not only of the teaching force* at large but also of the professional faculties. The Law Faculty, which has already adopted this requirement, is unanimous in its support. The vote in each of the other professional faculties, on the question of demanding such a preliminary college course for admission to the school or schools

* It is of course not strictly correct to describe the professors and adjunct professors as "the teaching force," since they constitute less than a third of it; but they represent its opinions not only in theory but in fact.

under its especial charge, is as follows: Medicine (including the clinical professors) 14 years, 2 nays; Applied Science,* 23 years, 4 nays; Teachers College, 15 years, 3 nays. A few writers, however, qualify their advocacy of a preliminary college course by insisting not only that equivalent training be accepted but that equivalency be liberally construed. In some instances the vote is limited to the school with which the writer is connected; in other instances a different rule is suggested as desirable in some other school or schools. Some of the legal and medical professors who favor the requirement of preliminary college study for their own schools express doubt regarding the schools of Applied Science; while, conversely, several of the professors in the Faculty of Applied Science and in the Teachers College Faculty who oppose this requirement as regards their own schools favor it as regards the Schools of Law and of Medicine. The remainder of the University (non-professional faculties and Barnard College)† is unanimous in its support of the requirement, at least as regards the Schools of Law and of Medicine. One voter in this group excepts the Schools of Applied Science from the proposed rule, and several express uncertainty as regards these schools and Teachers College. That the proportion of dissent, slight as it is, in each of the professional faculties should be so closely reproduced in the faculties not primarily concerned—*i. e.*, in the other professional faculties and in the non-

*In this and all following summaries, the Department of Architecture is included in the Faculty of Applied Science. In no important respect does the average opinion of this department vary from the average opinion of the Faculty of Applied Science.

†In Columbia University many professors have seats in more than one faculty. Nearly all the Barnard College professors and all the professors of Columbia College belong either to one of the non-professional faculties or to the Faculty of Applied Science. In tabulating the University vote on this and on the following questions, we have counted in the non-professional faculties (Political Science, Philosophy and Pure Science) only those professors who do not sit in a professional faculty; and in Barnard College only those who do not sit in some other faculty. The vote of the Columbia College Faculty will be stated separately on all questions that especially concern the College.

professional faculties—is a suggestive fact. It points, we think, to the conclusion that there is a high degree of homogeneity in our complex university. When we come to consider the period of preliminary college study advocated for each school we shall note further illustrations of this general correspondence of opinion.

The reasons advanced for maintaining in the Law School and for introducing in the other professional schools the requirement of a preliminary college course are briefly as follows. The members of the professions are the natural leaders of the community. They should stand distinctly above the public in general culture as well as in technical knowledge. This, as some of the writers assert, was the case in law and in medicine two generations ago, but is not the case to-day. In each profession, others affirm, there should be at least a leaven of broadly cultured men, and this element should be furnished by the university schools. It is urged, further, especially as regards lawyers, physicians and high-school teachers, that a professional man who has only a secondary and a professional education is not properly equipped for the practice of his profession. Some of the writers indicate the subjects in which a preliminary non-professional training is particularly necessary for the members of the various professions and the approximate amount of training necessary in each subject, and demonstrate in this way the inadequacy of the secondary education. It is pointed out, moreover, on the part of the Faculty of Applied Science, that the instruction in the schools under its jurisdiction is more exclusively professional than in the other great scientific schools of the country; that the superiority of the graduates of the Columbia schools in professional knowledge is in part outweighed by their inferiority in general education; that on this account the Columbia schools are losing prestige; and that the only way to remedy this defect without sacrificing the professional superiority already attained is by demanding a better general education for admission. The apprehension of loss of prestige if the standard of admission

be not raised is expressed also by members of the Faculty of Medicine. From the point of view of expediency, it is urged that the Schools of Applied Science have already raised their entrance requirements to a point which the high schools in many parts of the country do not attain, and that the present supply of properly equipped students is chiefly drawn from special preparatory schools and from the colleges. It is asserted also that the Schools of Medicine and of Applied Science are so overcrowded that it has become necessary either to raise the standard of admission or to enlarge the accommodations and increase the teaching force. Except in this argument, the economic question is avoided. It is expressly waived, in several answers, as one that does not concern the faculties.

Among the arguments advanced against the requirement of preliminary college study, the plea for the poor young man does not, so far as we have observed, appear at all; but the plea for the young man of talent occurs sporadically. It is asserted that some of the best students in the School of Medicine and in the Schools of Applied Science have been young men without college education. Two professors, one in the Medical Faculty, the other in the Faculty of Applied Science, are led by their personal experience to doubt whether college training is of any advantage to professional students. They state that the college-bred men under their instruction are not, on the average, more successful in their professional studies than those young men who come direct from secondary schools. A professor in Applied Science asserts that a college man is usually out of touch with the class of men with whom the engineer has most to do, and is therefore less likely to be successful in the practice of his profession. These dissenting opinions, few as they are, derive special weight in several instances from the character and experience of the writers. Among the nine dissenters are three who have held or who now hold the office of Dean. Still, as we have seen, the opposition is numerically insignificant. As far as the opinions and wishes of the teaching force can settle the question, we may take it as settled that

all the professional schools of Columbia University are to become post-collegiate schools.

II

This result brings us face to face with the question which the President raised in his Report of June, 1902. Granted that a collegiate education is to be interposed between the secondary schools and the professional schools of Columbia University, is the entire four-year course to be interposed, or only a part of it?

With very few exceptions the professors of Columbia University are of the opinion that a combined secondary, collegiate and professional education, as the secondary schools, the colleges and the professional schools are now organized, is too long and unduly delays the graduation of the professional student. With few exceptions, they are also of the opinion that time may best be saved—*i. e.*, may be saved with the least sacrifice of the educational results that are most to be desired—by requiring something less than four years of college study as a preparation for study in the professional schools. A medical professor indeed remarks that the medical course might well be shortened to three years, if the colleges would undertake the instruction in general science which is now given in the first year of the School of Medicine. This solution is of course suggested by the arrangement to which the President refers in his fourth question and which has been on trial at Columbia for more than a decade—the arrangement under which College Seniors may elect the first year in a professional school. At present the College and the School of Medicine are, as it were, co-tenants of a field which, as the professor points out, is not strictly professional; and what he proposes is to fence this ground off from the medical curriculum and convey it exclusively to the college. This plan, and its possible application to other professional schools, will be noticed later in considering the answers to the President's fourth question. For the present it is necessary only to note that a proposal to

transfer to the college the first year of a professional course is not in reality a proposal to shorten the period devoted to professional education. No such proposal comes from any member of any professional faculty, for there is no suggestion that the requirements for graduation from any of the professional schools can be diminished. It is suggested, on the contrary, that in the School of Medicine a fifth year may soon be required.

A few writers advocate a solution which would save time without shortening the period of college study. Taking as their point of departure the President's assertion that the requirements for entrance to the leading colleges have been increased during the last forty years, they suggest that the requirements be lessened. That a solution so obvious and so logical as this should find so few supporters (we have noted but a handful) and that no one else should think it worth while to allude to it even for the purpose of arguing against it—these facts are as significant as any amount of adverse argument. This plan is generally disregarded because it is considered impracticable.

A somewhat larger number of writers assert that the greatest waste of time in our educational system is in the secondary schools, and maintain that students should be prepared to meet the present college entrance requirements at least one year earlier. It is probable that their view of the facts is shared by a considerable proportion of their colleagues, who nevertheless refrain from advocating, as a solution of the existing problem, a reform which in their opinion the University has no means of securing. The implied irresponsibility of the University in this matter is not, however, conceded by all: one professor asserts that young men are purposely held back by their parents from early entrance into college, because our colleges have so largely abandoned that quasi-parental control over their students which they formerly exercised.

To the great majority of the writers it seems inadvisable to attempt to interpose four years of college study between the

secondary schools and the professional schools. To the question what period should be required, a fairly clear answer is given in each professional faculty except that of Medicine, but the answers are not uniform.

VOTE OF EACH PROFESSIONAL FACULTY ON THE CONDITIONS OF ADMISSION
TO THE SCHOOL OR SCHOOLS UNDER ITS CHARGE.

FACULTIES	For preliminary college course of			Against requirement of college course	Opinion not indicated
	4 years	3 years	2 years		
Law.....	4	2			
Medicine.....	2	6	6	2	
Applied Science.....		3	20	4	2
Teachers College.....		5	10	3	2

Some of the professors of the Faculties of Law and of Medicine who advocate a preliminary college course of four or three years for their own schools favor a shorter preliminary course for the Schools of Applied Science. Conversely, some of the professors in Applied Science and in Teachers College who advocate a two-year college course as preliminary to their own schools, favor a longer preliminary course for the Schools of Law and of Medicine.

The vote of the non-professional faculties and of Barnard College on the amount of college study to be required for admission to the professional schools is as follows:

For a preliminary college course of 4 years.....	5
“ “ “ “ “ “ 3 “	16
“ “ “ “ “ “ 2 “	17
“ courses of varying length.....	6
Opinion not indicated.....	2

Nearly all those who advocate college courses of varying length for admission to the different professional schools favor a three-year course for admission to the Law School and a two-year course for admission to the Schools of Applied Science and to Teachers College. As regards the Medical

School, there is a division of opinion analogous to that which exists in the Medical Faculty itself.

The general trend of opinion in both groups, the professional and the non-professional, may therefore be stated as follows: For admission to the Law School, three or four years of college study; for admission to the Medical School, two or three years of such study; for admission to the Schools of Applied Science and to Teachers College, a two-year college course.

The different periods of preliminary study advocated for the different schools presumably indicate a real difference in the amount of general training required for the different professions. The divergence of opinion in each of the professional faculties is of course due to the fact that some professors lay more weight on a reasonably early entrance into the active practice of the professions, while others deem it of supreme importance that the graduates of Columbia's professional schools should represent the highest type of education that is practicably attainable. By those who favor the longer periods of preliminary college study it is asserted that "the highest duty of the University is not so much to shorten the time in which a young man may become self-supporting, as to maintain the high standard of professional training which in the end so profoundly affects the welfare of the community," and that "it is less of a detriment to the State at large that many of its members must wait until their twenty-fifth year or even later before becoming self-supporting, than that the professions should be accessible to incompetent practitioners imperfectly trained." It is generally conceded that the standard of college education has risen in the last forty years, but it is urged by several writers that the standard of professional education has also risen. "Courses of professional study, as they are now constituted, make a much more insistent demand upon the intelligence and general equipment of the student than they did forty years ago." "A young man possessed of the intellectual equipment indicated by the A.B. degree of 1860 would hardly be properly fitted to enter upon the study of medicine in 1902."

A number of writers say that proficiency or the amount of work successfully accomplished should be considered rather than the duration of college study. Some suggest plans by which especially capable or diligent students shall be enabled to obtain in three years substantially the same education that is now obtained in four. Others advocate arrangements by which nearly the whole of the student body shall be driven through college in three years. When these schemes involve no substantial reduction of the present requirements for the degree of A.B., the writers have been tabulated as favoring the four-year course; for this course as it is now organized does not necessarily imply four years' residence: it represents a quantitative standard. When, on the other hand, a writer proposes to lower the requirements of graduation to such an extent that the average student could satisfy them in three years, he is tabulated as favoring a three-year course.

Both in the professional and in the non-professional faculties, there are many who reveal an impression or a conviction that the pace of college work is unnecessarily and undesirably slow. Many who favor a shortened college course as preliminary to a professional course insist that more work must be done in the two years or in the three years than is now done in the corresponding portions of the four-year course. Many suggestions are made regarding the character of the shortened course or courses—suggestions which it is impossible here to summarize with any degree of completeness. There is a noteworthy reaction against "the aimless discontinuity," as one professor terms it, of the elective curriculum; and both from the professional and non-professional faculties come demands for an elective-group system or for a single course in which required studies shall predominate. As to the character of the studies to be required in the groups or in the single shortened course, there is considerable divergence of opinion. Some of the members of the professional faculties desire groups especially designed to prepare students for their schools; but the greater number seem to agree with the members of the

non-professional faculties that the two-year course (or, if a three-year course be required, at least the first two years of that course) should be devoted mainly to "culture studies" or "liberal studies."

III

To the President's third question, the presumable intent of which may be indicated by a paraphrase: If a shortened college course be required for admission to the professional schools, what degree or academic designation, if any, should be given on such a course?—to this question no clear response comes from the teaching body as a whole. Nearly one-fourth of the writers make no direct answer, and the answers made are not only divergent, but in many cases vague. Four-fifths of those who favor a two-year college course for admission to the professional schools demand three or four years of study for the degree of A.B.; only 11 advocate giving it at the close of the two-year course. Of those who would require a three-year college course for admission to the professional schools, 18 are willing to reduce the requirements for the degree of A.B. to the same point, but 13 hold fast to the present standard. There are 14 who say that they would give no academic recognition to a shortened course except the right to enter the professional schools, and an equal number would give only a certificate. 33 favor, or do not object to, a degree or other academic designation; of these but two suggest a baccalaureate degree, and many state that they would not give a baccalaureate degree on any course shorter than three years. Few suggest any particular designation for those students who complete a two-year course; about a dozen favor "Associate in Arts." Some of those who say that they would give no recognition to a shortened course or would give a certificate only, and the majority of those who do not make any direct answer, are in favor of giving the degree of A.B. as at present, or even more largely than at present, on a combination of collegiate and professional studies. This counter-proposal is of course an answer to the problem suggested, if not to the question

asked; it gives academic recognition to a shortened college course by permitting it to count toward the degree of A.B.

The attention of the teaching force is largely concentrated on the suggestion made in the President's Report that the degree of A.B. might be given after two years of college study; and 110 of the professors not only express an opinion on this question, but also state or indicate what amount of study should in their judgment be required for the degree. The vote is as follows:

NORMAL PERIOD OF STUDY FOR THE A.B. DEGREE.

	Law	Medicine	Applied Science	Non-professional	Teachers and Barnard	Total
Four years.....	5	11	14	19	10	59
Three years.....	1	2	11	20	6	40
Two years.....		1	3	3	4	11
Attitude not indicated.....		2	1	1	3	7

The vote of the Columbia College Faculty, which is included partly in the third of the above columns and partly in the fourth, is as follows: For a four-year course, 18; for a three-year course, 16; for a two-year course, 2; opinion not indicated, 1.

As in the preceding table, those professors who think that the college course might be completed by some students or by the majority of students in less than four years, but who adhere to the present requirements (sixty points) for the degree of A.B., are placed in the four-year list.

On the face of these returns, there is a majority for the maintenance of the existing requirements for the degree of A.B.; but the attitude of some of the writers who are here catalogued as four-year men indicates that this majority is not very solid. In the College Faculty the existing standard has not even a bare majority. It is a singular fact that the rest of the University is a little less inclined to diminish the requirements for the degree of A.B. than is the College Faculty.

It is a singular fact, again, that the representatives of mathematics and of the natural sciences in the College Faculty support the four-year course by a vote of 6 to 5, while the other departments vote 13 to 12 against it. It is thus the representatives of the humanities who are a trifle more ready than their colleagues to abridge the time traditionally devoted to humane studies. The most conservative faculties are those of Law and Medicine. The most radical is that of Teachers College, in which only 7 out of 20 are supporters of the four-year course.

The arguments advanced in favor of shortening the A.B. course are in the main, those contained in the President's Report. The requirements for admission to college, it is said, have been raised during the last forty years to such an extent that the age of entrance has increased by something like two years. The work of the old college is now done partly in the preparatory schools, partly in the colleges. In consequence of the introduction of professional and graduate studies as electives, a large proportion of the students do not devote more than two years to the studies of the old college. Our present policy of permitting Seniors to study in the professional schools has practically established a three-year college course, while the arrangements by which students who intend to enter the Schools of Applied Science may anticipate two years of professional work have established for them a two-year course of college study. A shortening of the course for the A.B. degree to three years or even to two years would be, from one point of view, the reestablishment of the old college; from another point of view, it would be simply a recognition of the change which has actually taken place in the Columbia College of to-day.

The position of those opposed to any such change, or at least to any change so radical as the adoption of the two-year course for the degree of A.B., may be stated briefly as follows: The four-year college course has not yet been abandoned at Columbia—not even virtually abandoned. Even as regards those students who make the college degree on a combination

of collegiate and professional work,* it is not accurate to say that a three-year or a two-year college course has been established. Columbia holds to a four-year course of study: it has merely admitted into that course other studies than those of the old college. In many instances it may be questioned whether these new studies are not more proper to the college than to the professional school. The first year in the Medical School and the first two years in the Schools of Applied Science are almost wholly devoted to general science. It is indeed questioned whether law should be taught in the college, but the same question was asked forty years ago about many branches of natural science which now hold an unchallenged position in the college curriculum. There is no clear line of demarcation between "liberal" or "culture" studies and other studies: the distinction is mainly one of custom and resultant prejudice.

The college, moreover, is not "a mere vestibule to the professional school." It has other functions. Many of its students become interested in advanced non-professional work and continue their studies as candidates for the higher non-professional degrees. Many others go out from the college into journalism or into business life. If the degree of A.B. or any other degree be given at the end of the second year, a large proportion of these students will probably leave college as soon as they have secured the first degree. The proposed additional course of two years leading to the degree of A.M. will retain only a portion of them. Especially for those who intend to go into business, and whose education ends with the college, it is undesirable thus to abridge the duration of college study. Many of the best results of college life are derived from the maintenance of a certain mental attitude, from the acquisition of certain points of view, and from the intercourse of the students with one another; and these results cannot be obtained in so short a period as two years.

* The arguments on this question are those which were advanced when the existing policy was adopted in 1890. See President's Reports, 1890-92.

It is not conceded by all that the average age of graduation from college has greatly increased since 1860. One professor asserts that statements to this effect are based on the collegiate records of a few distinguished graduates of the last generation, who presumably obtained the degree of A.B. at an earlier age than the majority of their fellow students. Others, who do not doubt that the age of graduation has increased with the increase of the entrance requirements, affirm that the general level of education and of intelligence throughout the country has also risen, and that it was necessary to raise the standard of the college if its graduates were to maintain in the community the position which college graduates held forty years ago. It is unquestionably in the interest of the community that they should maintain this position. "It seems to me," writes a professor of Applied Science, "that our social fabric in large part rests upon the high degree of intellectual development which the four-year course gives to the enormous number of college graduates." This writer states that he will not raise "the ethical question of our right to degrade the value of a degree already sold, as it were, to a great number of present holders"; one or two others raise this point but lay little stress upon it.

The greater number of the dissentients, however, base their opposition to a shortened A.B. course on grounds of expediency. It is not deemed wise that Columbia should make such a change without securing similar action on the part of the principal universities. If we compare the requirements for the degree of A.B. in all the colleges of the United States, including all the little "universities" of the West and South, the degree appears to have no particular meaning; but as given by the leading universities and colleges of the East, it has a fairly definite value. If this value has risen, it has risen with approximate uniformity. Should Columbia attempt to restore the standard of 1860 single-handed, without the coöperation of the other leading universities, much confusion would result. When Columbia University had adjusted itself, in all its de-

partments, to the standard of the two-year A.B., would students coming from more conservative institutions be entitled to claim a premium for their four-year degrees? And would the two-year Columbia degree be taken by other universities at its face value, or only at a discount? If Columbia alone should make such a change, it would be accused of "cheapening" its degrees; and although it should simultaneously raise the value of its professional degrees, it would be regarded by the undiscerning public as a "cheap" university. Epithets are not arguments, but for that very reason it is difficult to argue them down. Such a shortened course might attract many students; but those who should come because they could obtain a college degree in two years would not be a desirable increment.

The foregoing objections are chiefly directed against the policy of giving the degree of A.B. on a two-year course; but the same considerations deter the majority of the teaching force from advocating any substantial reduction of the requirements for the first degree.

IV

As far as the judgment of the faculties can settle the questions under consideration, it may be taken as settled that students are to be admitted to some of the professional schools on the completion of a two-year college course. With the same reservation it may be taken as settled that no degree is to be given on the completion of such a course. The proposal to award the degree of A.B. on the completion of a two-year course is disapproved by ninety per cent. of the teaching force. There seems to be almost as great a majority against awarding any baccalaureate degree, and nearly a two-thirds majority against giving any sort of degree, upon the completion of such a course. It seems possible that a majority of the teaching force may, after full discussion, recommend the adoption of a three-year course for the college degree; but whether the four-year standard be retained or the three-year standard be adopted, there will be a gap of at least one year between the

course to be required for entrance to some of the professional schools and the course to be required for the degree of A.B. Not all of the professors are troubled by this prospective situation: some think that the student who passes through a portion of the college course and then enters the professional school should be content with the professional degree; but the great majority of the teaching force is searching, like the President, for some plan by which both the college degree and the professional degree may be obtained in six years, or at most in seven.

There remains to be considered the plan which has been on trial at Columbia for a dozen years and on which the President now requests the judgment of the faculties—the plan which permits professional* studies to count toward a college degree. Few outside the University, and not all within it, are aware that three variations of this plan already exist in the University.

(1) Seniors in the College are permitted to elect all the first-year studies of a professional school and to count such a year of study toward the A.B. as well as the professional degree.

(2) College undergraduates may elect during their four-year course all the studies of the first and second years in the Schools of Applied Science. College undergraduates may also elect professional studies in Teachers College. Such studies may count toward the A.B. as well as the professional degree.

(3) Students who have completed the first two years of a college course and who then enter Teachers College receive, after two years of professional work, a baccalaureate degree—that of B.S.†

* The term "professional studies" is objectionable because it seems to prejudice a question still under discussion—the question whether the studies referred to are not as proper to the college as to the professional school. The term is here used to mean "studies required in a professional school."

† The B.S. conferred on recommendation from Teachers College is not a purely professional degree, like the B.S. in Architecture or in Chemistry. Not only does it represent a combined collegiate and professional education, but the studies of the third and fourth years are largely college stud-

Under the first of these arrangements, the Senior remains nominally in the College but is really a first-year student in the professional school. Under the second arrangement the student really remains, or at least may remain, a college student, because together with his anticipated professional studies he pursues, or at least may pursue, non-professional or purely collegiate studies through the four college years. Even the professional courses which he is anticipating are, in many cases, given by professors who are members of the College Faculty as well as of the Faculty of Applied Science; and many of these courses are taken as electives by students who do not intend to enter the Schools of Applied Science. In fact, the general scientific courses in the College are largely identical with those offered in the Schools of Applied Science. Under the third arrangement the student who begins his professional studies at the close of his second college year ceases to be even nominally a college student: he is registered as a professional student. Common to all these arrangements is the shortening of the combined collegiate and professional course by one or two years. Common to the first and second, is the attaining of the degree of A.B. at the end of four years of combined collegiate and professional study. Under the third arrangement the degree awarded is not A.B. but B.S.

If we scrutinize closely these three arrangements, we see that the differences between the first and the third are formal rather than substantial. Stated in the most general terms, the plan of combination—*i. e.*, the plan of giving the first degree on a combination of collegiate and professional studies—takes one of two forms:

(a) The college student anticipates professional studies, but retains a real connection with the college during the full period prescribed for the first degree (arrangement 2).

ies, although they are pursued with a professional aim. The professional certificates given by Teachers College which correspond to the degrees to be obtained in the other professional schools are the Master's and Doctor's diplomas.

(b) The college student passes, at the close of the second or third year, into the professional school and obtains his first degree when the period of study prescribed for that degree has elapsed (arrangements 1 and 3).

These two forms of the plan may conveniently be described as the anticipated-studies plan and the deferred-degree plan.*

The extent to which Columbia College undergraduates avail themselves of either of these plans varies greatly as regards the different professional schools. There is a considerable movement of Seniors into the Schools of Law and Medicine under arrangement 1: in the academic year 1901-02, 13 Seniors elected the first year in Law and 10 the first year in Medicine. The movement into the Schools of Applied Science is less considerable. In each Sophomore and Junior class there are several (two to four) students who are anticipating applied science studies under arrangement 2. In their Senior year some of these practically pass over into the Schools of Applied Science by electing a full year's work under arrangement 1.† There

* "Deferred degree" is an objectionable phrase, in that it seems to pre-judge the question whether the work proper to the degree has been completed before the student enters the professional school; but we can think of no other convenient designation. If the College were still known as the School of Arts we might say "two-school plan."

† From 1890 to 1902, 14 students received the degree of A.B. from Columbia College and a professional degree in Applied Science on a seven-year combined course (arrangement 1). During the same period two Columbia students took an eight-year course, four years in the College and four under the Faculty of Applied Science. The six-year arrangement (arrangement 2) was adopted in 1895, announced in 1896, and went into effect in 1897. In June, 1901, degrees were conferred on three students who were the first to take advantage of this six-year course, graduating with the A.B. degree in 1899, and as B.S. (Chem.), C. E., and Mech. E., respectively in 1901. In the academic year 1901-02 there were eight students taking the six-year course, of whom two were to graduate in June, 1903, four in 1904, and two in 1905.

For several years past, 16 per cent. of the students in the Schools of Applied Science have entered with a first degree—about half of these with the degree of A.B. from various colleges. Students entering with the degree of A.B. complete the courses in Applied Science, on the average, in three years.—Report of Applied Science Committee on Courses of Instruction, December 20, 1901:

is practically no movement into Teachers College under arrangement 3. There is, however, some movement from Columbia College, and there is a considerable movement from Barnard College, under arrangement 2. From 1900 to 1903, the average yearly number of College students electing courses in Teachers College has been 61 (15 from Columbia, 46 from Barnard), and of these about one-half (7 from Columbia, 25 from Barnard) have been candidates for a Teachers College diploma. Neither in Columbia nor in Barnard College does arrangement 1 appear to be in practical operation; although a few Barnard Seniors elect so large a number of hours in Teachers College that much the greater part of the year's work is devoted to professional study.

These statistics do not show that legal and medical studies are more attractive than studies in applied science. The difference in the number of college undergraduates moving in the one direction or the other is due almost entirely to the fact that a much larger proportion of those who intend to study law or medicine, and a much smaller proportion of those who intend to study applied science take a college course on the way. If a college course be required for admission to the Schools of Applied Science, and if the arrangements under consideration be retained, this disproportion will doubtless disappear. Those students who come to college in order to enter the Schools of Applied Science will desire to begin their professional work as soon as possible. These statistics, moreover, throw no light on the question whether arrangement 1 or arrangement 2 is more attractive to the students. They do indicate, as might be expected, that arrangement 3 is less attractive. A large number of college graduates, including a respectable number of Columbia and Barnard graduates, are studying in Teachers College not only for the Master's and Doctor's degrees and diplomas, but also for the degree of B.S., or the Bachelor's diploma; but very few college students enter Teachers College at the end of their Sophomore year. The degree of B.S. does not seem to them a satisfactory equivalent for the degree of A.B.

Since any one of these arrangements is, in theory at least, applicable to the relations between the college and all the professional schools, it would be of interest to obtain a clear expression of faculty opinion, first, on the general question whether a first degree (A.B. or another degree) should be given on any combination of purely collegiate studies with studies which are required in the professional schools and, secondly, on the merits and demerits of the different modes of combination which already exist. The President's fourth question, however, refers in terms to but one of these plans, *viz.*, to that which we have called the deferred-degree plan, and only to that form of the deferred-degree plan in which the student who has really entered the professional school remains nominally a College Senior (arrangement 1); and the majority of the answers keep strictly within the frame of the question. Some of the writers discuss the anticipated-studies plan, but no clear opinion has been elicited from the teaching body as a whole on the broad question of the combination of collegiate and professional work for the first degree.

A further limitation is, as the answers show, at least suggested by the form of the fourth question. No less than 21 writers say what they think of the existing arrangement as a permanent policy without stating or even indicating what they think of it as a present policy. 15, however, before saying or instead of saying what they think of it as a permanent policy, declare that it is satisfactory as a present policy, but that they would prefer a different solution of the problem. These 15 must be recorded as not satisfied with the existing arrangement as a permanent policy; but they do not belong in the same category with those who disapprove of the existing arrangement under existing conditions. Fortunately, the attitude of the majority of the teaching force on both questions, on the question of present policy as well as on that of future policy, is sufficiently clear to make its presentation instructive. Further, a sufficient number have volunteered suggestions for the extension of the system to make it desirable to note their attitude.

A.B. DEGREE ON THREE-YEAR COLLEGE COURSE AND FIRST YEAR OF PROFESSIONAL COURSE

FACULTIES	As present policy			As permanent policy			Extension of system favored
	Satisfactory	Unsatisfactory	Attitude not indicated	Satisfactory	Unsatisfactory	Attitude not indicated	
Law.....	1	3	2		6		
Medicine.....	9	3	4	5	7	4	1
Applied Science....	19	3	7	17	11	1	10
Non-Professional...	19	10	14	15	24	4	9
Teachers and Barnard.	10	7	6	6	14	3	5
Totals.....	58	26	33	43	62	12	25

In the College Faculty, 15 find the existing arrangement satisfactory and 7 find it unsatisfactory under present conditions; 15 do not indicate their attitude. As a permanent policy, 12 find it satisfactory; 23 unsatisfactory; 2 do not answer.

On the face of the returns there is at least no majority against the deferred-degree plan as a present policy; and on a full vote there would clearly be a majority in its favor. There is a clear majority against the plan as a permanent policy; but this majority is neither homogeneous nor solid. It includes the 15 already alluded to, who do not oppose the plan under existing conditions but prefer some other solution of the whole problem. All these 15 say or imply that, if the solution they prefer be not realized, they will favor a retention of the present policy. This majority also includes the law professors, who do not want any undergraduates in the Law School, but are not necessarily opposed to the maintenance of the existing arrangement in the other professional schools. One of them states that he favors it. While a large majority of the Teachers College Faculty is opposed to the arrangement under consideration, an almost equally large majority indicates its approval of the analogous arrangement by which the degree of B.S. is given in Teachers College on a combination of col-

legiate and professional studies. One Teachers College professor thinks that the degree awarded on a four-year course that is partly collegiate and partly professional should in all cases be the degree of B.S.

Those who are in favor of the deferred-degree plan as a permanent policy prefer this solution to any other. Many of them find it "perfectly satisfactory" and "the only solution of the problem." In the existing division of opinion, this minority constitutes much the strongest single fraction: no other plan has nearly so many supporters. Nearly all the 25 who favor the extension of the plan would give to Juniors in the College the privilege of taking the first-year course in Medicine and in Applied Science. A few suggest reciprocity arrangements with other universities. Several maintain that students coming to our professional schools from other colleges at the end of the second or third year of their college course should receive from Columbia University, during or at the end of their professional course of study, the degree of A.B. These writers think that intercollegiate courtesy and justice require that students from other colleges which maintain an equal standard should be treated as liberally as students from Columbia College.

The arguments for and against the existing arrangements are in some cases limited to the question of permitting Seniors to count the first year of professional study towards the degree of A.B.; in some cases they cover a wider field. From some of the members of the non-professional faculties who are also members of the College Faculty comes the objection that students are drawn away from liberal into professional studies at just the point at which they are beginning to do the best work. This of course is an argument not only against the deferred-degree plan but against any plan for shortening the college course; it militates least strongly, however, against the anticipated-studies plan. Some members of the College Faculty and some members of the professional faculties say that the students do not do the best work when their interests

are divided between the college and a professional school. This objection seems to be directed principally against the plan of anticipating professional work piecemeal, but it is raised also against the deferred-degree plan in its present form, in which the professional student is registered as a college student. It is said, further, that the deferred-degree plan furnishes no clear-cut solution of the problem; that it is obviously a temporary device. "It has done its work," says one writer, "in demonstrating the necessity of shortening the college course." With a few writers this intellectual dissatisfaction warms into ethical revolt: the deferred-degree plan is not a frank solution of the problem but an evasion; "it is *contra bonos mores*"; "it savors of dishonesty." This indictment is based by one professor on the fact that the same studies are counted for two degrees; by others, on the allegation that the plan appears to maintain the four-year college course while in fact it shortens the college course.

It goes without saying that the ethical objections to the existing arrangement are not recognized as legitimate by its supporters. To them it seems that these objections are based upon an assumption that the fields of collegiate work and of professional work are completely distinct. To them many studies pursued in the professional schools, and particularly the general scientific courses, seem as proper to the college as to the professional school; and if these studies may fitly be counted toward either degree, they are unable to see why they should not count toward both degrees. Degrees should not be regarded as rewards for a certain amount of work, but as certificates of proficiency in a certain field. That, under the present arrangement, the student who has really gone over into the professional school should be registered as remaining in the college, may perhaps be objectionable, but this is not a necessary feature of the deferred-degree plan.

It is pointed out that a considerable number of students enter the Schools of Applied Science with the degree of A.B. from colleges other than Columbia; that these students, many of

whom have anticipated applied science studies in their college course, are able, on the average, to obtain their professional degree after three years of study; that in every such case a full year's work, which has already been counted toward the college degree, counts again toward the professional degree; and on these facts is based the question: How can we deny to Columbia College students the rights which are accorded to students of other colleges?

The positive arguments in favor of the deferred-degree plan or the anticipated-studies plan—for many of the arguments are applicable to either—are that each solves the problem of shortening the combined collegiate and professional course; that each gives academic recognition to the collegiate side of such a combined course; and that each maintains the traditional college course for those students who do not intend to enter a professional school. Each of these plans, moreover, may be adapted to the special requirements of the different professional schools. The anticipation of professional courses may begin at any point in the college course that seems desirable; the passage of the student from the college into the professional school may be set at the close of the Junior year for one school, at the close of the Sophomore year for another. If a professional school desires no college undergraduates among its students, it may be excluded from the operation of either plan. The special advantage of the deferred-degree plan is that it avoids the division of the student's interests. It is apparently for this reason that the majority of the members of the Faculty of Applied Science favor this plan rather than the anticipated-studies plan. The student who gives all his time to the work of the professional school can be held more effectively to the methods of that school and can be kept up to the pace which it requires of its regular students. As we have seen, in noting the attitude of the different faculties regarding the amount of college study to be required for admission to the professional schools, there is a very general impression among the professional faculties that the work of the college is

less serious than that of the professional schools. A considerable number—probably the majority—of the members of the professional faculties would prefer also that the student who takes a full year's work in a professional school should be registered as a student in that school, because this would avoid even a suggestion of a divided allegiance. The advantage, on the other hand, of the anticipated-studies plan is that it enables the student to carry the study of a few non-professional branches to the point at which their educational value perhaps becomes greatest.

V

In both of the plans last noticed the fact is recognized that between those studies which, by precedent, are strictly collegiate and those studies which, in their character, are strictly professional, there is an intermediate group of studies, and it is proposed that the university shall continue to regard the studies of this group as proper to either degree. The plan of shortening the A.B. course, on the other hand, assigns all or a part of these studies exclusively to the professional schools: all, if the course be shortened to two years; a part, if the course be shortened to three years. There is obviously a third possibility, *viz.*, that all these studies be removed from the professional curricula and assigned exclusively to the college. This solution is suggested by two writers: by one, as a general plan; by the other, as a plan that might be adopted by the School of Medicine. Like the proposal to shorten the A.B. course to two years, this is a clear-cut solution. Worked out in detail, it would maintain a four-year course in the college; it would introduce into the Junior and Senior years elective groups of studies, preparatory for the different professional schools; it would require the degree of A.B. or an equivalent education for admission to all the professional schools; it would maintain the three-year course in the School of Law, but it would shorten the course in the School of Medicine to three years and the courses in the Schools of Applied Science to two years. The relation between Columbia College and

these schools would be identical with the relation now existing between it and the non-professional schools (Political Science, Pure Science and Philosophy)—identical also with the relation existing in Teachers College between its four-year college course and its graduate courses. The only feature in such an organization of Columbia University that could be regarded as unsymmetrical would be the maintenance of a separate college, duplicating the work of Columbia and Barnard Colleges, for students intending to take the professional courses in pedagogy.

This solution of all the problems which confront us is not distinctly advocated, indeed, but is suggested by two writers. The plan of taking all the semi-professional studies out of the college (two-year course for the degree of A.B.) is supported by 11 writers. A solution which is not quite so clear-cut, since it leaves a part of these studies in the college and a part in the professional schools, but which is at least symmetrical, is that advocated by the 18 writers who would shorten the A.B. course to three years and would demand such a three-year college course for admission to all the professional schools. This fraction is strongest in the non-professional faculties. The deferred-degree plan, as we have seen, has 43 unconditional and 15 conditional or *faute de mieux* supporters, two thirds of whom belong to the professional faculties. They do not claim that this solution is clear-cut, but they hold that it meets the exigencies of the situation. Of the remaining writers a number not precisely determinable, perhaps a dozen, would admit college students to the professional schools before the termination of the A.B. course, but would give them no college degree.

VI

The President's questions were framed to elicit the views of all the faculties on the plan set forth by him in his Report to the Trustees. One feature of that plan, *viz.*, the suggestion that the degree of A.B. might be given on the completion of a

two-year college course, has attracted so much attention as to obscure and largely vitiate the public judgment of the plan as a whole. The fact that the faculties are not in favor of giving the degree of A.B. on a two-year course will, we apprehend, be similarly misconstrued: it will probably be said that the faculties have rejected the President's plan. This is not the case. What the President proposes is to bring every part of our complex University into logical and symmetrical relations with every other part. During Mr. Low's presidency a loose aggregation of schools was brought into administrative unity. President Butler is trying to bring them into educational unity; and his plan, at least in its really essential features, has the approval and support of the majority of the professors.

The President proposes that all the professional schools of Columbia University shall rest upon the basis of a preliminary college course. This proposal the faculties accept almost unanimously. He suggests that the period of college study to be required for admission to the professional schools shall be two years. This suggestion is approved, not only by the teaching body as a whole, but also by the faculties immediately concerned, as regards the Schools of Mines, Chemistry, Engineering and Architecture and Teachers College. As regards the School of Medicine, opinion is divided both in the Faculty of Medicine and in the rest of the University: a preliminary course of two years and one of three years find nearly equal support. As regards the School of Law, the average opinion of the University favors a preliminary course of not more than three years, while the majority of the Law Faculty demands a preliminary four-year course.

The President's suggestion that the degree of A.B. might be granted on the completion of a two-year college course is to be taken in connection with his suggestion that such a course be made the basis of admission to all the professional schools. The degree, in his plan, is to mark the dividing line between the college and the professional schools. If no such dividing line can be established, the chief reason for this proposal dis-

appears. To this proposal *per se* there is strong opposition in all the faculties, but on grounds of expediency rather than principle; and while there are few who support the two-year standard, a three-year standard is advocated by a minority that may easily become a majority. A three-year course for the degree of A.B., with such conditions as would sensibly accelerate the pace of college work, and the requirement of this degree or its educational equivalent for admission to the Schools of Law and of Medicine—this is a programme which would establish clear-cut relations between Columbia College and these schools and which would command very strong support. As to the relations between the College and the Schools of Applied Science and of Architecture, the faculties are in substantial accord with the President's aims. With him, they desire that the combined collegiate and professional course shall not exceed six years, and that the student who successfully completes such a combined course shall receive a collegiate as well as a professional degree. They differ from him, as they differ among themselves, only as regards the means by which these ends shall be attained. This is precisely the sort of difference that is most readily soluble in debate. Whatever plan may be adopted as regards the Schools of Applied Science can be extended to Teachers College, and also to the Medical School if it be deemed inexpedient to put this school on the same basis as the School of Law.

The inquest which the President has instituted, and of which we have reported the results, has already simplified the issues; and for the problems that remain to be discussed several possible solutions have been suggested. A discussion in which all the different and presumably equally legitimate points of view shall be presented is generally recognized as the procedure through which a satisfactory reconciliation of all the different interests or a just compromise between them is most likely to be attained. There are but two bodies in which all these different views and interests are sure of finding expression. The one

is the great council of all the professors and adjunct professors in all the schools—a council which has assembled but once in the memory of the present generation, and which, when last convened in 1890, was a much smaller body than at present. The other is the University Council, in which all the faculties are equally represented. Several writers suggest that this body is not only well qualified to discuss the questions raised in the President's Report and in his circular letter, but on the whole better qualified than any other to decide them. And since the questions upon which no general agreement has yet been attained all center upon the first degree, a further suggestion, made by several writers, deserves consideration—the suggestion that the University Council be empowered to determine, subject to the approval of the Trustees, on what conditions the first degree shall be awarded in Columbia University. Those who make this suggestion point to the facts that the first or college degree is already awarded on the recommendation of three different faculties—those of Columbia, Barnard and (as regards the B.S.) Teachers College—and that the degree of A.B. is awarded on work done under all the faculties; and on these facts they base the assertion that the college degree has already become a university degree, and is thus properly within the jurisdiction of the University Council.

M. S.

PRESIDENT PRITCHETT ON THEOLOGY IN THE UNIVERSITY

AMONG the addresses upon educational subjects delivered during the past year, few have equalled that of President Pritchett at the June Convocation of the University of Chicago. His subject is "The service of science to the university, and the response of the university to that service"; and he treats it with a breadth of view which should stimulate every university in this country to revise its dogmas and to put new energy into its work. To "open-mindedness and intellect-

ual sincerity," the distinctive characteristics of the scientific method, he attributes the great advances which the universities have made during the last decade, and he traces the development with an accuracy of perception and a grace of expression which illuminate his theme. The suggestiveness of the address, however, is its most valuable quality, and in one respect it points a moral which Columbia, not as a sectarian but as a religious institution, should well consider. Theology, Dr. Pritchett argues, should have its place in the ideal university.

Theology, which has most need for the company of the other sciences, has always been shyest of any intimacy with them. In this country it has only the slenderest contact with the university. The theological seminaries, which exist as separate schools, are not schools of theology in any scientific sense. They are training schools for fitting men for the ministry of a particular sect, practically denominational technical schools. However useful and however desirable they may be as fitting schools, it is most unfortunate that they should be the sole representatives of theology, and that theology should itself be divorced from other sciences. No better proof of this can be had than the meager work of scholarship which theology shows in this country. A still more serious criticism is found in the fact that the theology taught in our seminaries is the theology of a hundred years ago. The Protestant Church in this country, which showed such marvelous adaptability to the conditions of life during the first half of the last century, has not kept equal touch with the conditions of later growth. It has lost contact, on the one hand, with a large part of our laboring population in cities, and has lost touch, on the other hand, with scientific men. This has not come about by any lack of interest in religion. It has not come entirely through lack of interest of scientific men. The result, so far as we see it to-day, is due in considerable measure to the attitude toward scholarship of those who control the various branches of the Protestant Church. One of the causes of such estrangement is the isolation of theology. The university represents to-day the highest effort of the race, not alone toward intellectual achievement, but toward intellectual sincerity. Theology cannot grow, in any deep sense, apart from this

common effort toward truth. On the other hand, if religion be the divine life in the individual human soul, the knowledge of that life has a significance beyond all other knowledge; and the science which deals with that life, with its history, its phenomena, and its laws, should surely find a home with other sciences in the true university. For a training school for preachers the university has no place, but for theology as a true science the ideal university has a need as real as that which the true theology has for the university.

During the past fifty years the faith of Christendom has seen old ramparts broken down and old creeds swept away; but through these scenes of doubt there has shone the glimmer of a larger faith, which grows brighter as religion joins hands with scholarship. For such a union there is no other place than a university which shelters the sincerest scholarship and which breathes the air of spiritual freedom.

To the students of all the theological seminaries in and about New York City Columbia offers the opportunity of broadening their professional training by taking courses in history, in sociology, in ethics and in all the other studies of our non-professional graduate schools; and during the present academic year seventy-four theological students are availing themselves of the opportunity. Such an arrangement, however, does not bring us much nearer the realization of Dr. Pritchett's ideal. It is not for the students of theology alone, nor for them primarily, that he desires to secure the liberalizing influences of the university, but for theology itself; and neither can this end be attained, nor can the reciprocal influence upon the other sciences of the science of "the divine life in the individual human soul" be secured, except by adding to the university a faculty of theology.

THE SPEYER SCHOOL OF TEACHERS COLLEGE

THE occupation of the new Speyer School building by the experimental school of Teachers College has more than local significance or passing interest. Never, perhaps, has there been a more favorable opportunity for the systematic working out of some of the pressing problems of educational practice. A substantial, well-arranged and thoroughly equipped building; a corps of well-trained and enthusiastic teachers whose sympathy is fully enlisted in the purposes of the school; a body of pupils small in number but chosen in such a way as fairly to represent public-school conditions; freedom from the constraint of mere traditionalism, and conscious fealty to the cause of educational progress and expansion—these are some of the favoring conditions under which the school undertakes its double task of embodying the highest ideal of a public elementary school and of furnishing a working laboratory to supplement the theoretical work of Teachers College.

The new building, a front view of which is presented with this article, occupies a plot of ground at number 94 Lawrence street, just west of Amsterdam avenue, near 129th street. The structure with the equipment and ground represents an outlay of \$130,000 on the part of the donors, Mr. and Mrs. James Speyer. In its architectural composition, the building follows the precedents of the German Renaissance. The high-stepped gable, which is the most noticeable feature of the front, is particularly characteristic of the style that prevailed in North Germany in the middle of the sixteenth century. The main entrance, with its niche above, recalls old German doorways where the niche is usually occupied by the statuette of a saint. In this case the niche contains a figure taken from the seal of Teachers College. The main part of the building is finished in dark oak and, while for the most part it is very simple in design, some characteristic German ornament may be found in the mantels, in the plaster work of the first story hall, and in



Speyer School

SPEYER SCHOOL

the iron work of the stairways. The special requirements of a school building with respect to heat, light, ventilation and the many details affecting practical convenience, have been carefully considered and, it is believed, have in large measure been met.

The basement contains a large and well-equipped gymnasium, with accessory toilet rooms and shower baths, and the plants for warming and ventilating the building. On the first floor are the kindergarten room, the principal's office, and two public libraries, one for children and one for adults. The second and third stories contain eight class rooms, all adequately lighted and handsomely furnished. The fourth floor is devoted to special rooms for cooking, sewing, bench work and other manual arts. The fifth floor is designed for the living apartments of the principal and his family and other residents of the school. This floor will accommodate a group of seven residents, who will devote themselves not to class-room instruction but to the direction of clubs for children and adults and to other forms of school extension work during the afternoons and evenings.

The roof will serve as a recreation ground and garden for the children and residents of the school and for the people of the community in general. It is enclosed by protective guards of wire-lattice work and has a trellis for vines extending from the rear of the roof to the green-house pavilion in front. Potted plants and vines will ornament the roof, and a small plot of earth will be laid out for practical gardening to be carried on by the children of the primary grades. In addition to these there will be one or more large sand tables which will allow much of the work otherwise conducted in the school-room to be carried on out of doors, when the weather is favorable. It is expected that this roof garden will make possible many activities of an unusually wholesome kind and will prove to be one of the most delightful and helpful features of the building.

Readers of the *QUARTERLY* will naturally desire to know

what are some of the leading purposes and aims of the school that are considered by its sponsors to justify the large expenditure of money for its equipment and the important place that has been assigned it in the general scheme of Teachers College. In the first place the school will furnish, to properly qualified students of Teachers College, opportunity for actual teaching under expert supervision and criticism. The two essentials of professional training are the knowledge and the skill demanded in professional service. The first of these essentials Teachers College attempts to provide through instruction in subjects of school study, in the history and philosophy of education, in educational psychology and in school administration. The second essential is provided through instruction in the theory and practice of teaching, with the closely related work of observation and practice. Such procedure, to quote Dean Russell, "is analogous to the didactic lecture, dispensary practice, and work in clinic and hospital long familiar in the training of physicians."

The Horace Mann School furnishes "the opportunity to observe good teaching under favorable conditions in order to fix ideals and to establish a practical standard of merit." The desire to keep conditions as nearly standard as possible explains the policy of protecting this school from possible disturbance occasioned by practice teaching. It is obvious, then, that the Horace Mann School cannot meet all the requirements of the professional training of teachers. To meet the demands for practical class-room work is, therefore, an important aim of the Speyer School.

There is a distinct and important difference between the character of practical work ordinarily expected of undergraduates and that which, it is hoped, will to an increasing extent be done by graduate students of Teachers College. The principal aims in practical work for undergraduates are to test and to strengthen ability to teach. Beyond these, there remains as a most important aim of practical work for graduate students the development of capacity for leadership in educational

thought and practice. Undergraduate students will, to a large extent, give their attention to the practical working out of a curriculum already furnished in most of its details. Graduate students will be expected to take active part in the discussion and adjustment of problems arising in the actual administration of the Speyer School; to make contributions to the curriculum, so far as variation in its subject-matter seems reasonably to be demanded; to propose and apply improved methods of teaching and discipline; to devise means of testing mental abilities and of making accurate and helpful records of the physical and intellectual progress of children; and to make systematic investigation concerning the conditions of life prevailing in the neighborhood of the school, with a view to increasing the effectiveness of the school as a center of social life.

The chief value, however, of the practical work of graduate students is to be looked for in the possible influence of such work upon the method and scope of advanced study in the field of education. Students of education have been slow to avail themselves of the resources of scientific method, although there is a wide range of practical educational problems that obviously demand scientific investigation. Concerning the proper content of an elementary-school curriculum, for example, contemporary thought and action are in a strikingly unsettled condition. In response to a general demand there has been, during recent years, a marked enrichment of the curriculum, with the result that there is now a widespread outcry against an overloaded course of study. The obvious solution of the difficulty is to determine what are the indispensable and necessary elements of the curriculum and to exclude much matter that is relatively unimportant. There is, however, no general agreement as to relative values of subject-matter, and the important problem remains unsolved. There is a clear demand here for an accurate answer to the question, based upon scientific observation and experiment.

In the field of educational method, there is urgent demand for experimental work that shall aim to show how class-room knowledge may be more fully assimilated by the children; or rather how, in the very process of teaching, vitally significant relations may be established between the subject-matter of study and concrete human interests and activities. The normal outcome of thought is action of some kind. Indeed it may be said that the value of thought may be measured by the extent to which it issues in conduct. If this be true, there is evident call for much revision of school practice, having in view a far larger opportunity than is now given for the expression of thought in the form of definite purposive action on the part of the children.

The problems for experimental study suggested above are intended merely to indicate the character of the research work that will be undertaken in the school. It is hardly possible here to indicate the wide extent of the field in which careful observation and experiment are imperatively demanded. The peculiar responsibilities that have been assumed by the Speyer School, however, open a new and important field of investigation to students of education. The school is not only to meet the requirements of the traditional school, but is also to serve as a social and educational center for the adult population. Problems at once present themselves as to the kind and extent of work that shall be undertaken. How shall this school-extension work be conducted so that the students shall not only be interested, but educated in a truly worthy sense? To what extent may such work safely and profitably be undertaken by the public schools of a city? These and many other problems of similar character must be answered not *à priori*, but by careful reference to the experience of social settlements and of individual observers, and by scholarly field-work on the part of properly qualified students of education.

It is clear that no amount of library research will suffice for a thorough solution of such problems as those suggested above. Valuable as the records of educational theory and practice are

as warnings and guides, they can do no more than suggest general lines of procedure when we encounter new situations and problems. To secure results that will stand the severe test of experience, we must supplement a wide knowledge of the history of general culture and of educational activity by a thoroughgoing knowledge of living children and by the experimental study of school problems.

It seems hardly necessary to answer the oft-repeated objection that "experimenting with children" is a reprehensible practice, incompatible with the best interests of children. Every intelligent teacher is an experimenter, in the sense that he is constantly seeking to find better means and better matter to carry out the aim of education. The person trained in the methods of scientific research simply has an advantage over a person not so trained, in the directness and facility with which he is able to carry on his experiments.

Apart from its functions as a working laboratory, the school has, of course, its own internal problems respecting the matter and the method of its work. The attitude of the school toward these internal problems may be summarized in the words of Dr. F. M. McMurry: "Since a school is a miniature community preparing for life in the larger community called society, the aims of a school should correspond with those of society. At least the principal objects of the two should be the same and possess much the same relative worth." In accordance with the implications of this statement, the Speyer School aims to treat physical health as a first essential condition of successful living. Furthermore, it recognizes a duty in this respect not only to the pupils but to the parents as well. It aims therefore to study the home environment and the habits of its pupils and to use every effort to influence the parents to furnish proper sanitary and hygienic conditions in the homes. This work will be supplemented by physical exercise and play in the gymnasium and by direct instruction upon matters relating to physical well-being.

Direct attention is given to the development, through proper

activity, of initiative, self-direction, leadership, and administrative ability within specific fields. Another well-defined aim of the school is the development of tastes, that is of permanent interests, especially of social interest that regards with loyalty the claims of the social whole; and to this may be added the cultivation of an open, tolerant mind that is as fully conscious of unsolved problems in the subjects covered as of the problems that have been mastered. It will thus be seen that there are many matters that are considered by the school to be as necessary to successful living as knowledge, and to come as properly within the range of school activity. Sound judgment, ability to execute plans, habits of service, and a tolerant mind are each to count for at least as much as mere scholarship.

The conditions of life which, in most communities, favor the development of a well-ordered family life, of wholesome social intercourse and of active participation in affairs of civic interest are, in the neighborhood of the Speyer School, very largely absent. Practically no one occupies a home that he can call his own save by temporary right of lease, often from month to month. There is scarcely a building in the whole section occupied by a single family. Few men living in the community pay any direct tax, municipal, county or state. There are no beer gardens or other places of amusement of a kind that bring the families of the community together for social intercourse. Besides the homes, then, there remain only the saloons as centers of social life, and there is no place in these for the women, the girls or the small boys. The homes themselves are small, crowded, and ill-suited to the development of a wholesome and active neighborly spirit or of a stable family life. The open street furnishes the only meeting ground for a large proportion of the children and of the adult population.

In view of the striking lack of unifying and socializing influences in the community we are considering, there are obvious possibilities of usefulness for the school that lie entirely outside the traditional field of school activity. Evening

classes in literature, in science, and in special subjects such as cooking, sewing, mechanical drawing, stenography and book-keeping; debating societies; gymnasium classes; mothers' clubs; parents' meetings; library privileges; lectures, musical programs and other forms of entertainment; Sunday school; social gatherings for neighborly intercourse—these are among the features that may give the school a large and significant place in the life of the community. Indeed, it may not be going too far to say that the chief service of the school is to be found in the opportunities and interests that it offers to the adult population. It is certain, at least, that the authorities of the school must fairly face the problem of the true responsibility of the school toward the adults as well as toward the children of the community.

Tradition has given the common school its usual field of activity and the subject-matter of its curriculum. Such matters as personal cleanliness, the care of the home, the hygiene of cooking, the necessity of economy and of provision for the future, and many of the most significant facts of physiology, have heretofore remained very largely outside the field with which the school was directly concerned. The needs of this community with respect to these and many other similar matters is evident. The issue is clear, then, between an aim furnished ready-made by tradition and one determined primarily by the social needs of a large and important community. There can be no more proper nor more urgent claim upon educational thought than the right settlement of this issue.

JESSE D. BURKS,

Acting Principal of the Speyer School

A HISTORY OF COLUMBIA DRAMATICS

II*

SECOND PERIOD: THE COLUMBIA COLLEGE DRAMATIC CLUB
[1887-1893]

THE second period of Columbia Dramatics—that of the Columbia College Dramatic Club—is marked by a pronounced advance in the artistic quality of the productions, in the financial receipts, and in the frequency and regularity of the performances. It comes to an end after several years of discontent and altercation, in an open split between the College and the Club. The Club then becomes a regular amateur organization, probably the most famous in the city, the Strollers.

On the nights of January 7 and 8, 1887, the new Columbia College Dramatic Club gave its first performances, in the concert hall of the Metropolitan Opera House, for the benefit of the University crew. The plays were prepared, rehearsed and staged in two weeks; and a remarkably successful production it is said to have been.

The bill was a double one, consisting of two one-act farces, *The Two Buzzards* and *My Turn Next*, with a sketch from *Adonis* between them. The casts follow:

The Two Buzzards, or Whitebait at Greenwich.

Mr. Benjamin Buzzard (secretly married to Sally)

Mr. Meredith Howland, Jr., '85

Mr. Anthony William Glimmer (lodger at Buzzard's)

Mr. Robert C. Sands, '87

John Small (a waiter late of the Crown and Sceptre at Greenwich).....Mr. Richard T. Wainwright, '89 M.

Miss Lucretia Buzzard (secretly married to Glimmer)

Mr. Douglas Farley Cox, '89

Sally (a servant).....Mr. Frank C. Warren, '89

Scene.—An apartment at Buzzard's.

* The first part of this History was published last September: COLUMBIA UNIVERSITY QUARTERLY, IV, pp. 377-383.

During the spring of this same year (1886-87), the project of a sophomore presentation of *Ralph Roister Doister*, the oldest English comedy known, was conceived. The production would have been something of an archaeological freak; but it is useless to speculate what it would have been, for the project is never heard of after.

However, we have yet to hear once more from the Columbia College Dramatic Club before the summer of 1887. This worthy organization, to which, after all is said, we must accord the praise of having firmly established Columbia dramatics as a regular function of the college social year, gave its second performance on April 23, 1887, at the New York Academy of Music. The play was John Brougham's two-act musical burlesque, *Pocahontas, or the Gentle Savage*, "an original, aboriginal, erratic, operatic, semi-civilized, demi-savage extravaganza." The proceeds were devoted to the University crew.

The production was under the direction of Mr. Francis Wilson, then of the Casino, who had studied at Columbia and kindly volunteered his services. It seems hardly probable that too much credit can be accorded Mr. Wilson for whipping into shape in two weeks a show of the nature of *Pocahontas*, with a cast of amateurs, only a few of whom had as yet acquired any experience, and a chorus of raw undergraduates, treading the boards for the first time. Indeed, we have some enlightenment on the subject, from the *Spectator*.

The rehearsals up to within a few days of the performance were discouraging (all rehearsals are), as the principals, with the exception of Mr. Coward and Mr. Morrell, seemed to find difficulty in mastering their lines; but constant repetition and the wittily pointed directions of Mr. Wilson brought the delinquent ones to time, and left no doubt as to the success that awaited the public performance.*

The cast was as follows:

* *Columbia Spectator*, May 5, 1887.

Of ye Savages:

Powhatan I, monarch of the Tuscaroras

Edw. Fales Coward, '83 L.

The Rt. Hon. Quash-at-Jaw..... Eugene J. O'Sullivan, '89

Opodildoc..... Frank C. Warren, '89

Cologog..... J. C. Wilmerding, Jr., '90

Tingo..... S. A. Maguire, '89

H. R. H. Princess Pocahontas..... R. L. Morrell, '88

Pooteepet..... R. C. Sands, '87

Dimundi..... D. F. Cox, '89

Weechavenda..... J. W. Gerard, Jr., '89

Krosascabee..... L. C. Reamer, '88

Medicine Men..... J. R. Plum, Jr., '87; J. S. Mapes, '88

Of ye Englyshe:

Captain John Smith..... V. G. Hall, '88

Lieut. Thomas Brown..... C. K. Beekman, '89

Dutch:

Mynheer Rolf..... R. T. Wainwright, '89

Chorus of Indians, soldiers, sailors, school-girls, etc.

The chorus was composed of the Columbia College Glee Club and of undergraduates not members of the Dramatic Club.

It will be seen, at a glance, that this cast is pretty substantially that of the preceding midwinter show, strengthened by the addition of Mr. Coward, the only non-student in *Pocahontas*. The acting of two men is worthy of especial commendation: Mr. Coward's Powhatan comes down to us as "delightfully fresh and spirited," hitting off that absurd austerity which suspends an audience between seriousness and laughter—a species of comic acting far superior to mere broad fun. The Pocahontas of Mr. Robert Lee Morrell, also won hearty approbation. The passionate Indian girl was rendered with taste and skill; and the make-up was so pretty that the leader of the orchestra is said to have fallen in love with Pocahontas and even to have threatened a bunch of roses!

On the whole the Columbia College Dramatic Club scored a great success. Mr. Wilson was presented with a bronze bust of Napoleon, as a token of the club's appreciation. This account of *Pocahontas* is best closed by a paragraph from *Spectator*:

We are sure that Columbia holds a high place among college dramatic clubs. She has not yet attempted legitimate comedy, as has Amherst, but there is no reason why she cannot. Everyone agreed that our performance was better than that of the Hasty Pudding Club, and some enthusiasts went so far as to say that it was the best amateur performance ever given in New York.

The next Columbia dramatic entertainment took place on the evenings of January 13 and 14, 1888. In the first year of its existence the Dramatic Club had established the custom of giving two performances in the course of the season: the first about midwinter, usually a double bill of comedy or farce; and the second and more important in the spring, a musical extravaganza. Accordingly, the entertainment now under consideration consisted of a light one-act comedy on the lines of farce, *A Frightful Frost*, and, after a few numbers by the Glee Club and a recitation by Mr. Coward, a one-act farce, *B. B., the Boston Boy*. Naturally, there was no need of a playhouse as large as the Academy of Music, and so the performance was given in the concert hall of the Metropolitan Opera House.

The *dramatis personae* of *A Frightful Frost* were few:

<i>Mr. Watmuff</i>	R. L. Morrell, '89 L.
<i>Mrs. Watmuff</i>	R. C. Sands, '89 L.
<i>Ferdinand Swift</i>	V. G. Hall, '89 L.
<i>Walter Litherland</i>	G. A. Morrison, Jr., '89 L.
<i>Emily</i>	T. H. Kelly, '89 L.

It is curious to note, in passing, that every member of the cast is of the class of '89, School of Law.

The closing bill of the programme was *B. B., the Boston Boy*, a one-act farce. The cast was as follows:

Bob Rattles (the ex-chicken, a retired pugilist)

	E. J. O'Sullivan, '89
<i>Mrs. Puncheon</i> (the landlady)	F. C. Warren, '89
<i>Mr. Benjamin Bobbin</i> (an agent).....	R. T. Wainwright, '89 M.
<i>Joe</i> (a waiter).....	B. F. Duff, '88
<i>Squire Greenfield</i>	G. A. Morrison, Jr., '89 L.
<i>Dorothy</i> (a housemaid).....	T. H. Kelly, '89 L.
<i>Mike</i> (a policeman).....	R. C. Sands, '89 L.

On the whole the show was very successful; and the Dramatic Club handed over to the rowing interest of Columbia, one thousand dollars, as the profits of these performances of January 13 and 14, 1888.

And now, when Columbia Dramatics were progressing so rapidly and so smoothly under the auspices of the Columbia College Dramatic Club, like a thunderbolt from a clear sky came the attack that opened a period of altercation. On March 30, 1888, *Spectator* printed the following letter, which we reproduce in full, as a very interesting document in the annals of Columbia dramatics:

To the Editor of *Columbia Spectator*:

The Columbia College Dramatic Club, which presented last spring Brougham's *Pocahontas*, has announced its second burlesque for the benefit of the University crew. The performance last year was highly successful from a financial point of view. It also achieved artistic success, owing to the excellent acting of three or four of the principals, to a splendidly trained chorus, and to the appearance of the College Glee and Banjo Clubs. The entertainment netted a good sum to the Boat Club; and in this fact lies the only possible justification for the existence of the club as the "Columbia College Dramatic Club."

Let us examine into its foundation and history. The members of a certain society in College decided to organize a dramatic club, and to call this organization the "Columbia College Dramatic Club"; and they also decided that only members of their fraternity should be eligible to the Club. The last condition was relaxed only in two cases. The first was the admittance of the most prominent amateur actor in New York.* The second was the admittance of two outsiders for the sole reason that the fraternity could not supply enough men for all the characters. The Club presented two or three puerile, trivial farces with moderate success, all the officers of the Club and all the actors but one or two being members of the fraternity.

It was seen that such a policy could not be pursued. Even the members of the society recognized the utter impropriety of College men appearing in such inappropriate plays; and it was decided to present a burlesque. But here a difficulty arose. The mem-

* Edward Fales Coward, Columbia School of Law, '83.

bership of the fraternity in College was not sufficiently large to furnish all the actors and the chorus, as well as every officer in the Club. So, outside assistance had to be called in; and, as a last resort, the students of the College were requested to help out the fraternity. They did; and only four members of the Columbia College Dramatic Club, including the three outsiders who were taken in at the commencement, were in any way responsible for the success of that entertainment. The students who composed the chorus, the Glee Club, the Banjo Club, and, notably, one outsider,* a member of the Senior class, were the principal elements in the success of the performance.

This year the Club has adopted an even more stringent system of exclusion. The parts will be even more strictly confined to those who are in that fraternity, and those who want to get in. It has even dared to call in men who are not in College. But the same old trouble has been encountered. The fraternity was not large enough to furnish all the characters necessary, and the assistance of the College has been asked to again contribute to the aggrandizement of their fraternity. Let the men who help them out this year feel that they are merely being made convenient to the Club, and that no talent or ability they may display will ever entitle them to membership in the Columbia College Dramatic Club.

I repeat, the one qualification for admittance to this Club is membership in the fraternity I have so frequently mentioned. While this Club exists, no other truly College club will be formed. Such a policy as the present one is prejudicial if not fatal to every dramatic interest at Columbia, and the adoption by these men of the title, "Columbia College Dramatic Club," if it be not fraudulent, is justified only by the money the performances bring to the Boat Club.

This letter was signed "X." Its consequences worked themselves out slowly. The performances of the Dramatic Club went on for a time undisturbed and successful as ever; but noticeable efforts were made by the separate classes to give independent theatrical performances, a movement which supplied the occasion† of the Sophomore show, now a regular event.

* Robert C. Sands, '87 C., and '89 L.

† The purpose of the Sophomore Show is quite different—to raise funds to defray the debt incurred in Freshman year for its crew.

On Friday evening, April 6, Saturday afternoon and Saturday evening, April 7, and also on the following Friday, April 13, at the Berkeley Lyceum, the Dramatic Club produced its second extravaganza, this time an original burlesque on early New York society, in three acts, entitled *Captain Kid*, or *A Peerless Peeress and an Haughty Pirate*, by Mr. George Austin Morrison, Jr., '89 Law, a prominent member of the Club and performer on previous occasions. *Harper's Weekly* devoted an entire page to illustrations of certain scenes. The setting and costuming were quite up to the Dramatic Club's standard, set in *Pocahontas* of the preceding year. The cast was composed of the members of the club, with the assistance of a few extra students.

About the middle of that same month, April, 1888, the Freshmen gave an entertainment at the Berkeley Lyceum. There were no theatricals, and the performance would not be noted here save for the fact that recitations were given by Messrs. Coward and V. G. Hall, both prominent members of the Columbia College Dramatic Club—a fact which shows that the estrangement between that organization and college circles was very slight. But on Thursday evening, May 10, 1888, an independent dramatic performance was given by the Junior class, School of Mines, at the Metropolitan Assembly Rooms. Two farces were presented, *I've Written to Brown* and *Little Toodlekins*. The members of the casts were Messrs. Snow, Weeks, Erb, Harrington, Guiterman, Heinze, Whitlode, Schroeder, Ives, Smith, and Gifford,—an entirely new set of names in Columbia dramatics. These gentlemen are rather to be remembered for their enterprise than for their achievements. The acting of the first farce was "decidedly poor,"* and the second was but slightly better. The Banjo Club gave some selections, and again Mr. Coward recited, as did also Dr. Gustavus Hass. The entertainment was a financial success.

ALISON M. LEDERER

* *Columbia Spectator*, May 24, 1888.

NATHANIEL F. MOORE, LL.D.,

PRESIDENT OF COLUMBIA COLLEGE, 1842-1849

THE first of her own sons to fill the office of President of Columbia was the Rt. Rev. Benjamin Moore of the class of 1768; and after an interval of thirty-one years he was followed by another graduate, in the person of his nephew, Nathaniel F. Moore of the class of 1802, who was elected President in 1842. At this time fifteen of the Trustees comprising the Board were alumni, as were also a large proportion of the Faculty. Among the latter were the Rev. John McVickar, '04, Charles Anthon, '15, and Henry Drisler, '39.

Nathaniel F. Moore was born at Newtown, Long Island, on Christmas Day, 1782, of a respectable but not wealthy family, descended from the Rev. John Moore, an Independent minister, pastor of a colony of English who planted the town of Newtown (then called Middleburg) in 1652. His father was Dr. William Moore, a highly respected physician who, for more than forty years, was in extensive practice in New York. His uncle, the Rt. Rev. Dr. Moore, was the second bishop of the diocese of New York and President of Columbia College from 1801 to 1811. Upon his graduation he delivered the Latin salutatory, *De Astronomiae Laudibus*. He received his Master's degree in course, and the honorary degree of Doctor of Laws in 1825. He chose the profession of the law, which he studied under a much valued friend of his family, Beverly Robinson, of the class of 1773, and was admitted to the Bar in 1805. He never practised extensively, however, and in 1817 he found an occupation more congenial to his tastes, and for which he was more peculiarly fitted, in the appointment as adjunct professor of the Greek and Latin languages in Columbia College. Three years later on the death of Dr. Wilson he was appointed professor, which position he held until 1835, when he resigned. For the next four years he remained almost



Nath. F. Mowley

PRESIDENT, 1842-1849

constantly abroad, traveling extensively, and shortly after his return he was elected to the presidency of the College.

The appearance of the College at this time has been described by a member of the Class of 1839. He tells us that it

occupied a plot of ground bounded by Church Street, Murray Street and College Place. The building was of brick, covered with stucco, painted light brown, with trimmings of freestone. The front was to the south. At the east and west ends, respectively, were two houses, occupied by members of the faculty, which projected considerably beyond the middle buildings; all were three stories high, and there was an old-fashioned belfry in the middle; it was a picturesque old structure, unmistakably academic. In front was a Green of considerable size, shaded by large sycamores. The place had an air of conventual quiet and seclusion, and was delightful in summer when the shadows of the broad leaves rested on the light brown walls and the flagstones of the walk. The middle of the edifice was devoted to the chapel and library. The latter occupied the second floor, and on the floor below were the lecture rooms. The location was about the centre of the fashionable part of the city.*

A few years later Park Place was extended, bisecting the Green and passing directly in front of the College buildings. The view which we publish represents Park Place before it was extended (looking from Broadway towards Church Street), and the fence which is shown at the end of the place is a part of the College enclosure. With the opening of Park Place a large part of the property was converted into leasehold and the size of the Green was much curtailed, but the building remained until its demolition without material change. The site is now marked by a bronze tablet at the corner of Murray Street and West Broadway, the latter corresponding to what was formerly College Place.

* A view of the buildings and grounds as they appeared at this time, was published in the *QUARTERLY* of March last, and we now reproduce a map made almost contemporaneously which shows the situation of the College and the Grammar School with reference to adjacent streets.

There were but ninety-five students in the College when Dr. Moore took office, and the number did not go beyond a hundred and thirty-six during his presidency. The annual receipts and expenditures were about \$23,000, and the floating debt was some \$60,000. The expenses of keeping the old buildings in repair and of meeting the taxes and assessments upon the "Botanic Garden," as the property at 47th Street was still called, were more than the funds of the College were able to meet. This financial situation not only prevented any advance but actually compelled retrenchment; so that it is not surprising that this period discloses no evidence of growth. Nevertheless the College held its own. The course of study, which was probably as broad as in any American college of that day, was as follows:*

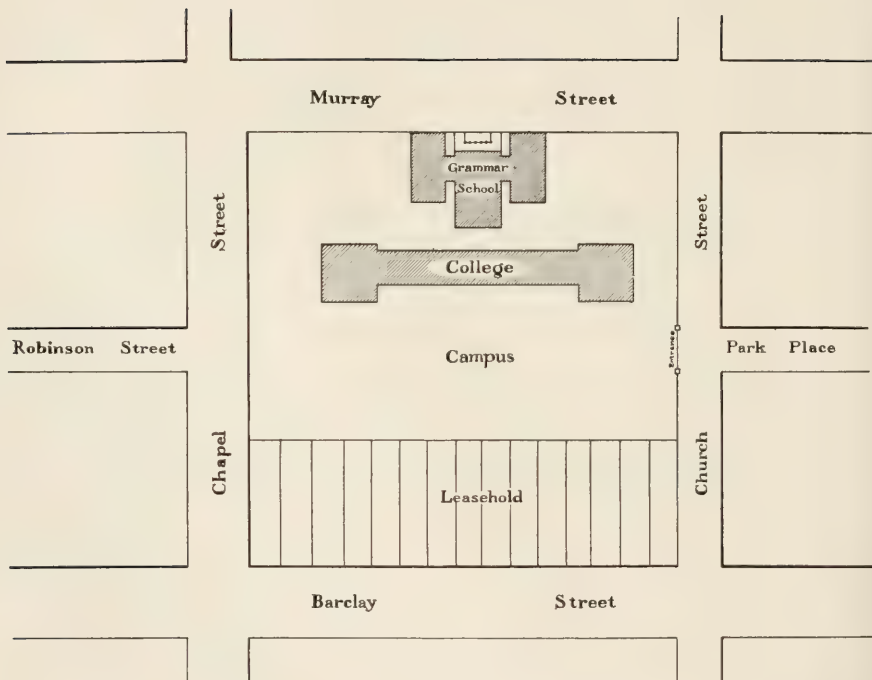
Freshman Class. English composition and universal grammar, 2 hours. Mathematics (algebra and geometry), 3 hours. Greek and Latin (Herodotus, Satires and Epistles of Horace, Cicero *de Senectute*, Latin prose composition and versification), 7 hours. Ancient geography and history, 2 hours. German, 3 hours. Elocution, 1 hour.

Sophomore Class. Intellectual and moral philosophy, and modern history, 4 hours. English composition, 1 hour. Greek and Latin (selections from Euripides, Horace and Tacitus), 4 hours. Greek and Roman antiquities and geography, 2 hours. Greek and Latin composition in prose and verse, 1 hour. Experimental philosophy (chemistry and physics), 3 hours. Mathematics, 4 hours. German, 2 hours.

Junior Class.—Intellectual and moral philosophy, and rhetoric (taste and criticism), 4 hours. Greek and Latin (Aeschylus, Plautus), 4 hours. Greek and Latin composition in prose and verse, 1 hour. Experimental philosophy (chemistry and geology), 4 hours. Mathematics and astronomy, 3 hours. German, 1 hour.

Senior Class. Intellectual and moral philosophy, English composition, political economy, evidences of natural and revealed

* From the number of hours scheduled, especially in sophomore year, it must be assumed either that there was some election (which is not probable), or that some of the courses were half-year courses.



PLAN OF COLLEGE GROUNDS
BEFORE THE OPENING OF PARK PLACE

religion, 4 hours. Greek and Latin (selections from Sophocles and Juvenal, Greek literature, composition), 4 hours. Experimental philosophy (chemistry and mechanics), 5 hours. Mathematics and astronomy, 2 hours. German, 1 hour.

The President himself gave instruction, and an excellent account of him as a teacher was given by the Rev. Dr. Benjamin I. Haight in a memorial address delivered in the College chapel. Dr. Haight was a member of the class of 1828, and as a student sat under Dr. Moore when the latter was professor of Greek and Latin. He writes :

Upon our entering upon our Sophomore year, we came for the first time under the care of Professor Moore. He then occupied the chair of Latin and Greek, which he had filled for the previous eight years. He was in the first prime of life—tall, spare, lithe, with a fine intellectual face, bearing the marks of years of hard study and close application. His air was grave and serious, though not severe. His very presence inspired at once the respect of his pupils. Professor Moore possessed the faculty—somewhat rare, I apprehend—of interesting his pupils deeply in the exercises of his lecture room and of inspiring the desire of knowing more and more of the great authors of antiquity and their famous works. He was a thorough classical scholar himself, having been trained in the College by the venerable and erudite Dr. Peter Wilson (who for twenty-six years filled the chair of Greek and Latin). He was much more than a linguist or grammarian. He appreciated thoroughly all the beauties of the old poets and philosophers and enjoyed intensely their elegant niceties of expression, their marvelous use of words, as well as their vigor and subtlety of thought. He was filled with their spirit. And so, as he sat with his students,—not by any formal lectures, not by any display of knowledge, but by his occasional remarks, by calling their attention now and then to the turn of expression and to the epithet,—he insensibly awakened and strengthened their desire to go onward in their study of the wondrous authors whose powers they had begun to feel.

Professor Moore was a devout Christian man and well versed in the sacred Scriptures. The poets and sages of the Hebrews

and the Evangelists and apostles of the primitive Christian Church were familiar to him. And he was wont, whenever the opportunity occurred, to turn from the pagan authors to the inspired writers of the Scriptures, when thereby the meaning of the expressions of the latter could be more fully brought out by the words and phrases of the former, or when the superiority of the teaching of the latter on the great questions of life and duty was apparent; and he did this so simply and naturally, and, as it were, just by the way, that no question was ever raised in the minds of his scholars as to the truth and pertinency of his suggestions. And, while he was thus our accomplished and admirable teacher, he was also our faithful and conscientious mentor in reference to our individual character and conduct. His aim was to help us to become Christian gentlemen as well as accurate scholars.

Another of Dr. Moore's students has given us his impression of the President and some reminiscences of his own undergraduate days. He writes:

The President was always dignified but slightly formal in his demeanor toward students during his monitory interviews with them; his kindly spirit generally leading him to close the interview with the words: "Only please don't let it occur again, sir." He also slightly resented any attempts to be jocose during the time allotted for College exercises. A prominent part of the exercises at morning prayers in the Chapel was a declamation, in academic gown and from a platform, by one student of each of the four classes. This exercise was much disliked by the students, and one morning they showed their dislike by the following arrangement. The first speaker ascended the platform and poured forth the well-known extract, "Banished from Rome! What's banished but set free?" etc. Descending from the platform, he stripped off his gown and passed it to the second speaker, who donned the gown, ascended the platform and hurried through the same extract. Then, hastily descending, he passed the gown to number 3, who went through the same performance, with the same speech. But as number 4 was rushing forward to complete the series, the President's patience was worn out, and he closed the performance by exclaiming: "That will do, Mr. —! That will do! We have had quite enough of it!"



PARK PLACE IN 1842
THE COLLEGE CAMPUS IN THE DISTANCE

On another morning the President, on taking his seat at his desk for prayers, was startled by finding on his Bible a printed obituary notice of his own death, well filled out with laudatory phrases describing his many merits, and winding up with the usual "None knew him but to love him, none named him but to praise." But all my kindly thoughts of old Columbia on Park Place are borne to my memory mingled with recollections of students and professors traversing that beautiful Green under the shadows of its many massive trees. And he fades from my memory as, on Commencement morn, in academic robes arrayed, he solemnly led our procession of students and professors, the Mayor of the city and State officials, up Broadway to the church selected for our annual eruption of oratory and for the laying on of Presidential hands in conferring degrees.

The good doctor's administration was distinctly paternal, as is evidenced by a circular letter which he sent to parents, inviting them to call and confer with him as to the manners and morals of their sons, and by the minute record which he kept of the attendance and conduct of the students. There was, nevertheless, considerable activity among the students in other than the prescribed pursuits. "Shaddle's Bakery," afterwards known as "Wall's Bakery," at the corner of Murray and Church Streets, was a popular place of resort for the undergraduates as well as a base of supplies. During President Moore's term several of the Greek-letter fraternities were established; and much interest was taken in the Philolexian and Peithologian literary societies, which, in addition to their ordinary meetings, held not infrequent joint meetings at which addresses were delivered by distinguished graduates.

Dr. Moore published, in 1834, a work on ancient mineralogy, the first on the subject in this country; in 1835, six lectures on the Greek language and literature, the first of a short course which he had read in the College; in 1844, a short *Introduction to Universal Grammar*, for the use of the Freshman Class; and, in 1846, *A Historical Sketch of Columbia College*. He took a very lively interest in the library of the College, and, during a portion of the interval between his resignation of his pro-

fessorship and his election to the presidency, acted as librarian, and spent much time in cataloguing and introducing better order into it. His own library, which was large and valuable, was purchased by the Trustees and incorporated in the College library. Of his presidency, which lasted seven years, Dr. Haight writes as follows :

He discharged all its duties with scrupulous care and with good success. During six years of this time, being one of the Trustees and having the most warm and reverential regard for him, I was brought again into close relations with him. I never thought that he enjoyed the duties of the headship of the College as he formerly did those of his professorship. They were too multifarious, too much devoted to details of management and discipline ; and so not wholly congenial with his past habits as a student, scholar and thoughtful man, living much alone amid his books and given to reflection. But here, in his new and widely different position, he had the same regard for the young men under his care and the same solicitude for their welfare. His address to the students at his first Commencement was marked by a singularly paternal and affectionate tone, and his counsels were most wise and appropriate.

In his inaugural address, delivered at the Commencement of 1842, President Moore outlined very clearly the duties of his office ; and, addressing himself especially to the students, he stated with great simplicity, and yet with power, the benefit and utility of the academic course of study, and defended the great value of the classics as the chief instrument of all true educators. He maintained that

The chief object of academic education is not so much to store the memory with facts that may admit of useful application as to train the intellectual powers ; to develop and to strengthen faculties that shall enable the educated youth to lay hold on any subject with ability, to engage successfully in any pursuit that demands intelligence and activity of mind. How many examples might be adduced, in England alone, of men who from the universities have entered at once upon the busiest scenes of public



WILLIAM C. SCHERMERHORN

CLASS OF 1840

life—going from Oxford with nothing save Greek and Latin; from Cambridge with mathematics only, as was thought; but, nevertheless, at the outset of their career, displaying a masterly ability in the conduct of the most varied and intricate affairs.

President Moore was one of the leading classical scholars of his time, not only reading Greek but speaking it readily; and he was also a man of large and varied observation, mingling much with men in various countries and taking as keen an interest in scientific discovery as in the history and literature of the past. The last few years of his life were spent at his home in the Highlands of the Hudson. About three months before his death he visited the College for the last time. Although then in his ninetieth year, he was still strong in body and mind; and he manifested great interest in everything connected with the College to which he had devoted the greater part of his long life, with a loyalty and enthusiasm which never failed.

He died on April 25, 1872, beloved for his warm and affectionate disposition and respected and admired for his varied and profound attainments. He was buried in the churchyard of St. Mark's in the Bowery.

WILLIAM COLFORD SCHERMERHORN, A.M.

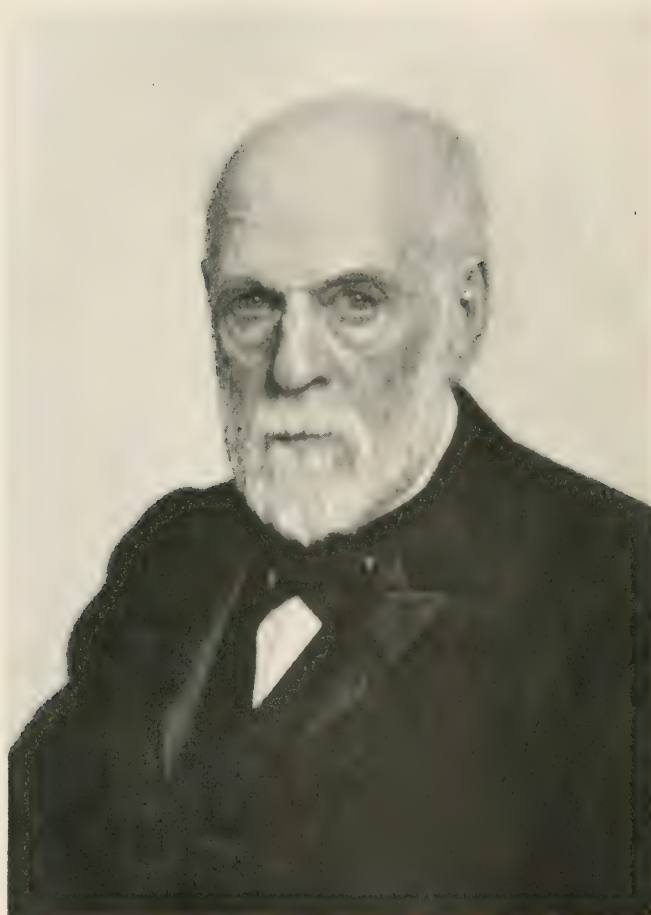
CLASS OF 1840

SEPARATED by more than half a century, and by an even wider gulf of change and circumstance, from the College which stood on Park Place, it is difficult to realize that Columbia University is the same college of later growth; and the death of William C. Schermerhorn has severed one of the strongest personal links between the life of those earlier days and the present. As a boy, he lived in Park Place, within a few steps of the College gates. Entering the College in 1837, Mr. Schermerhorn was familiar with the old building when, in appearance, it was almost the same as before the Revolution.

The spacious campus, which he knew, long antedated the invasion of the street and still commanded a view of the Hudson. Under the presidency of Judge Duer he attended chapel with the five or six score of students who daily responded to the ringing of the morning bell, and with them he acquired wisdom from the lips of Anthon and McVickar and Renwick. Few have profited by their teaching more than Mr. Schermerhorn, if we may judge from his interest in education; and most of all it is to the honor of the old college that it inspired in him a love of Alma Mater which continued through his life.

After graduating in 1840, he studied law. In 1860—just about the time that the Law School was established in Great Jones Street, in the old mansion built by his father and in which he himself had lived for many years—he was elected a Trustee. He was unfailing in his attendance at meetings of the Board and of its committees, and often visited the College and listened to the lectures. His first important service was rendered as a member of the committee which organized the School of Mines, and he devoted to the subject the same careful attention which he gave to all matters affecting the College.

Upon the retirement of Mr. Fish, as Chairman of the Board, Mr. Schermerhorn was elected to succeed him. It was with difficulty that he could be induced to accept the office, for extreme modesty and reticence were almost as marked among his characteristics as the unvarying courtesy and gentleness which so endeared him to his associates. It was as Chairman, however, that his finest qualities were most conspicuous and of the greatest service to the University. Thoroughly familiar not only with the history of the College but with the details of its financial and educational administration, he was in the fullest sympathy with every wise plan for its enlargement and development. The seventy years which preceded his taking office cast no shadow upon the clear vision with which he contemplated the great changes incident to the removal of the College, the financial burden which it involved and the future possibilities which it opened; and the courage of youth inspired the confi-



ABRAM S. HEWITT, LL.D.

CLASS OF 1842

dence with which he faced the responsibility. That the University upon its new foundation has advanced so far toward the realization of his hopes is due in no small measure to his open mind and sound judgment, to his cultivated taste and progressive spirit, and to his untiring devotion to its interests. The building which he erected, and which is the most conspicuous evidence of his interest in the University and of his appreciation of its needs, will perpetuate the name of Schermerhorn as that of a loyal son of Columbia; but among his benefactions must be included not his gifts only but also the time and thought and effort which he spent in Columbia's service.

JOHN B. PINE

ABRAM STEVENS HEWITT, A.M., LL.D.

CLASS OF 1842

COLUMBIA has lost one of her most distinguished sons. Mr. Hewitt's long career was, indeed, especially associated with Columbia's annals. When his active life-work began, he was an instructor in the old College; in the last years of his venerable age he was one of the governing body of the new University. It was to Columbia that he owed his early training, as it was upon her that he reflected honor by the achievement of his maturity.

Mr. Hewitt was an exceptionally perfect type of all that we believe to be most characteristic of the representative American. The circumstances of his life and the phases of his character illustrate with peculiar vividness both the opportunities which our country gives to all, and the controlling power with which the typical American is quick to seize those opportunities and master them and bend them to his will. Born to comparative indigence and obscurity, he acquired by his own exertions, wealth and fame. Pursuing for many years a most practical and material vocation, he nevertheless cultivated a liberal philosophy of life which led him always to subordinate

his personal interests to the welfare of those about him. Assuming political leadership and the guidance of a great party, he showed that his supreme devotion was given, not first of all to faction, but rather to the service of the State.

If we hold that Mr. Hewitt was a typical American, we also like to think that he represented very accurately and nobly the best traditions of our University. He had the scholar's training and the scholar's instinct, and he loved learning for its own sake; yet these gifts and instincts never put him out of sympathy with the active life of our eager, strenuous democracy. He was a man of exceptional cultivation, one whose mind was disciplined, whose intellect was trained to the severest processes of logic, and who had thought profoundly upon many themes; but with him, cultivation did not mean isolation and enervation. Instead, it stimulated and inspired him toward the accomplishment of great ends. In other words, scholarship to him was the handmaid of citizenship, and learning seemed desirable mainly because it led to a more luminous understanding of the problems of life itself; so that, in his conception of it, intellectual training was not an acquisition to be selfishly enjoyed, but rather an instrument of power wherewith to shatter wrong and wage eternal warfare for the right. This was the ancient Greek ideal, and it has been cherished always at Columbia, whose roll of honor bears such brilliant testimony to the fact.

As a man of affairs, Mr. Hewitt will be best remembered by the circumstance that although he was for many years one of the greatest employers of labor in the United States, he never found himself at variance with those whom he employed. His enlightened mind worked out a business policy which solved, so far as his own sphere of influence extended, that problem which is still viewed by many as being utterly insoluble; for he reconciled the claims of capital and labor, and while never losing sight of what his own interest demanded, he also never failed to bear in mind the thought that this interest was not to be selfishly subserved, but that upon him had

been laid a great responsibility which made him ultimately answerable for the welfare and the happiness of many others. As a statesman, he is most thoroughly identified with the guidance of his party at a time when a single false step might have plunged the nation into civil war; and although the compromise to which in 1877 he gave a strong support resulted for the time unfavourably to his party, no one who now looks back upon that crisis can venture to deny that his course was statesmanlike and truly patriotic. As a philanthropist, his name is linked with the great benefaction which Peter Cooper first conceived, but to which Mr. Hewitt gave form and substance and in which his were the guiding mind and the shaping hand. As a man and citizen, he will be long remembered in the rôle which suited him so well throughout the later years of his useful, honourable life.

When he retired from the mayoralty at the end of 1888, he shook himself free from political ambition, and to some extent from party ties, to become the disinterested friend of all who were striving in any way to foster the interests of the community in which he dwelt. He stood forth as a fine embodiment of the civic spirit, giving freely of his time, his substance, and his counsel, whenever and wherever these were needed to aid the cause of practical philanthropy, of municipal improvement, or of political righteousness. His influence was strengthened and deepened with every passing year; and it has not died with him; but it endures, both in the lasting impulse which it has imparted to the forces of enlightenment, and in the memory of all who love to cherish the inspiration of a fine example. His character and the abiding lesson of his life shed lustre upon the University whose son he was, and whose interests he served with loyal and unflinching devotion.

HARRY THURSTON PECK

EDITORIAL COMMENT

The recent convocation of scientific societies at Washington was an important event in the history of science in America, and is of somewhat special interest to us, as Columbia University led the way. The plan for a convoca-

Convocation Week tion week for the meetings of scientific and learned societies was proposed and carried into effect by members of our faculties; it was presented by our representative to the Association of American Universities; and we set the example of lengthening the Christmas holidays by two or three days, in order that the week in which the first of January falls may be left free for these meetings. Harvard University took similar action last November, thus making the movement unanimous for the seventy leading American institutions of learning. Most of our scientific and learned societies have hitherto met either in midsummer or in Christmas week. The summer meetings were unsatisfactory because of the dispersal of men of science during the holidays and because of the excessive heat; the winter meetings suffered from the shortness of the time and the requirement of absence from home at Christmas. Convocation week has proved to be a successful solution of the difficulties. The American Association for the Advancement of Science which has hitherto met in the summer and the American Society of Naturalists with its affiliated societies which has hitherto met in Christmas week joined in the Washington congress and made it the largest and most notable ever held in this country. There were some thirty-five scientific organizations in session, with an attendance of about fifteen hundred men of science. During the same week the Modern Language Association of America met at Baltimore; the American Historical Association and the American Economic Association, at Philadelphia; and the American Mathematical Society and the Association of American Universities, at Columbia University. In all these meetings the Columbia faculties were well represented, and Columbia professors and instructors contributed their fair share of papers.

The way of the junior investigator has, financially speaking, ever been hard, but some of its hardness may be taken away by the recent action of the Carnegie Institution in creating research assistantships. To these positions **Research Assistants of the Carnegie Institution** there will now be appointed a goodly number of the most promising candidates in many lines of scientific investigation. Such a use for a portion of the funds of the Institution, it will be recalled, is in especial accordance with the wish of Mr. Carnegie, as expressed in his deed of gift, to discover and encourage exceptional talent among the younger men in all departments of science. The QUARTERLY directs especial attention to these positions, since among the junior investigators of Columbia University there are a number of strong candidates for such benefits.

According to the official circular, the purpose of the Institution in creating these assistantships is "to discover and develop, under competent scrutiny and under favorable conditions, such persons as have unusual ability." Its intention, however, is not to provide means by which a student may complete his course of study, nor to give assistance in the preparation of dissertations for academic degrees. "Work of a more special character is expected of all who receive appointments." It is further made clear that such an assistant should work under the supervision of an investigator who is known to the authorities of the Carnegie Institution to be engaged in an important field of scientific research, and in a place where there is easy access to libraries and apparatus. On the other hand, there is no reason, it appears, why an assistant should not be appointed whose special work requires that his time be spent in the field or in foreign institutions. The method of selecting assistants is not unlike that employed by various universities in selecting fellows. The candidate is to make an application to the headquarters of the Institution in Washington, and the document should contain a detailed statement of his qualifications and a list of publications, together with testimonials from his research sponsors. He should state, furthermore, the character of the research work which he wishes to carry out and the probable duration of time for which the allowance is asked. Copies of his published papers are also desired. The annual stipend of

the assistant is to vary "according to circumstances. As a rule, it will not exceed one thousand dollars per annum." An appointment is made for one year, but may be subject to renewal. It is of interest to note that the candidate is to be selected primarily for his work; that no one is to be debarred from appointment on account of nationality, residence, age or lack of an academic degree; and that the positions will be open on equal terms to women.

An educational inquest which elicits answers from one hundred and seventeen professors furnishes no mean body of expert opinion; and when the inquiry is directed to so important a matter as the

Shortening the College Course	correlation of all the parts of one of the most complex of American universities, the results are of consequence not only to the trustees, faculties, students and alumni of that particular university but to all who are concerned with or interested in the problems of the higher education in the United States. At Columbia the question immediately under examination is the correlation of three colleges and seven professional schools,—for Teachers College includes both an undergraduate college and a professional school,—and even this broad question can not be discussed without reference to the relation of the colleges to three other schools, <i>viz.</i> , the non-professional graduate schools. The plan which the President set forth in his Report to the Trustees, and which he has submitted to the judgment of the faculties deals with the whole problem. His suggestion that the degree of A.B. might be given on a two-year course—a suggestion on which public attention has been unduly concentrated—is but an incidental feature of his larger plan. In the digest with which this number of the <i>QUARTERLY</i> opens, the opinions of the professors are set forth and the general result is summarized. The really important outcome is this: while the teaching body does not favor the idea of establishing a two-year A.B. course, it accepts the broader and essential features of the President's plan. From a practical point of view, accordingly, this preliminary inquiry has been of great value, and its results are on the whole very satisfactory. By revealing the lines of substantial agreement as well as the points of difference, it has limited the field of the coming debates; and in showing that the differences which exist
--	---

concern the means to be employed rather than the ends to be sought, it raises a strong presumption that an acceptable compromise may be discovered.

One of the points on which there seems to be an extensive if not a general agreement is that more work ought to be done each year in the College. Those especially who desire to base admission **Lengthening the** to the professional schools on a shortened college course insist strongly on the necessity of **University Year** getting more work done in the two years or in the three years than is now done in the same periods. A step in this direction has already been taken, as is elsewhere pointed out, by lengthening the teaching year. Under existing arrangements the academic year varies from thirty-five and a half to thirty-six and a half weeks. Under the new arrangements, which take effect next autumn, it is to have a uniform length of thirty-seven weeks. The demand for this change came chiefly from Columbia, Barnard and Teachers Colleges and was based in part on the assertion that, after deducting two weeks or even ten days for mid-year examinations, the present teaching year is a very short one. The schools in which no mid-year examinations are held accepted the lengthening of the year either because they also desired an increase of teaching time or for the sake of uniformity.

At the same time a way has been opened to obtain more consecutive work in all the schools by a rearrangement of holidays. The University Council is now empowered to lessen, if it shall see fit, the interruptions occasioned by the somewhat numerous single holidays, and to establish an Easter recess from Maundy Thursday to Easter Monday inclusive. In this case, however, uniformity of practice does not appear to be contemplated: the recess is to be given only to the schools that desire it.

The new edition of the Columbia Gymnasium Guide contains all the information needed for the use of the gymnasium and twelve pages of most excellent exhortation and counsel regarding physical

**The Gymnasium
Guide**

exercise and personal hygiene. It is true, as Professor Richards of Yale has remarked, that it is "development of the highest kind of will . . . when, to take exercise, a man resolutely overcomes the distaste for it"; and, as

Dr. Savage adds, it requires an equally strong mind to observe rigidly the negative laws of health. If the average man could develop such tenacity of purpose as to follow all the advice here given, we are sure that nothing but *vis maior* in the shape of accident or of particularly lethal bacteria would necessitate recourse to medical aid; but by reason of negligence as well as misfortune the student will find use for the list of eight physicians and surgeons printed at the end of the pamphlet. These will not only treat him, but, if he bears a card from any member of the Committee on Employment, they will treat him gratuitously.

The Guide also contains the records, for the last four years, of gymnastic competitions within the University and with other institutions. In the Columbia contests it is interesting to note that in the first year Science carried off the majority of the championships, while in the three following years the College has been in the lead. In the four intercollegiate gymnastic contests, with from five to eight institutions competing, Columbia has once carried off first honors and has twice held the second place. In the competitions conducted by the Society of College Gymnasium Directors and decided by a comparison of authenticated records—competitions that are not the less interesting because they are wholly unspectacular—Columbia has not yet won the individual strength championship; but twice in four years the strongest fifty men have been found on Morningside Heights. In these competitions the records have been rising year by year with a rapidity that is almost bewildering. Last year the strongest fifty were 34 per cent. stronger and the strongest individual was 48 per cent. more powerful than in 1898-99. When strength is increasing at such a rate, it is evident that the individual is not withering and that the Caucasian is not played out. It is also evident that American college education is not altogether a failure. It is probable, of course, that participation in these contests is increasing, and that muscular possibilities are being more generally developed. It is probable that there is knack as well as strength in making a record, and that knack (which is simply the harmonious coöperation of muscles and nerves) is being perfected. It is possible—but of what value are the inexpert conjectures of the weaklings of an earlier generation?

The remarkable advances in medicine which have been made of late years and the general application of scientific methods of research to the discovery of the cause and cure of disease

create new demands upon the medical schools
The Medical School and necessitate a broadening and strengthening of medical education. The first step has been taken by the College of Physicians and Surgeons in the establishment of higher requirements for admission; and it is probable that these requirements will gradually be advanced until a student upon entering shall have had not less than two years of college training, including an elementary knowledge of physics, chemistry and biology. The Medical Faculty has also adopted a carefully revised curriculum, to go into effect at once, which will make the work of the College wider in range, and more effective in character. The establishment of summer courses of instruction, to begin in 1903, is also announced, and a reading room and medical library will be opened to the students at the beginning of the next term. Increased opportunities for laboratory instruction will also be provided. These changes and others have been recommended to the Trustees by their Committee on Education. The Committee state in their report that they "are convinced that, with the great and deserved reputation of the College of Physicians and Surgeons, its distinguished services to the medical profession for three generations, and its excellent buildings and equipment, there is an opportunity before the Trustees to make it as efficient as any center of medical education in the world," and that "no effort to this end should be spared." As a prerequisite to this result, however, the Committee report that the school must be put upon a true university basis; that its facilities for laboratory and clinical instruction must be increased; that more ample provision must be made for the teaching of small sections, rather than large classes of students; and that the spirit of research must be encouraged. Recognizing the fact that the cost of medical education is very great and is likely to increase and that it cannot be met by the fees of students, the Committee urge the need of increased endowments, which will enable the College to utilize to the utmost its facilities, already exceptionally great, and to offer enlarged and increased advantages to its students.

The revival of the Alumni Association of the Law School after its long sleep of thirty years is an event of more than ordinary interest and significance. The conditions under which the work of the school was carried on in the seventies and eighties did not tend to draw the students of that period into a homogeneous body; and it is perhaps not to be wondered at that the alumni association organized in 1860 went into innocuous desuetude after a precarious existence of a dozen years. But to those who are familiar with the Columbia Law School of to-day, it will not seem surprising that among the thousand graduates of the last ten or twelve years there should have arisen a spontaneous movement for an organization to bind them together in the bonds of a common sympathy and a common purpose. It was their good fortune to find such an organization already in existence, needing only the touch of the new spirit to restore it to life and vigor. This was accomplished in November last, when, on the suggestion of some of the more recent graduates, the standing committee of the original association again met and elected officers and a number of new members. Since then the association has displayed every symptom of permanent reanimation: its constitution has been revised, and its membership further increased. After its long absence, it appears among our other alumni organizations somewhat as a stranger, but it will be welcomed not the less heartily, both as an added source of strength to the Law School and as affording to the graduates of that school their due representation among the alumni of the University.

To the President of the University, in his great sorrow, the hearts of his colleagues go out in sympathy. The University itself, in that social life which even a metropolitan university possesses, is poorer by the loss of a gracious and winning presence; of a tact that never failed, because it sprang from a kindly heart and was guided by sympathetic insight; of an influence that made always—and the more strongly because its exercise was unconscious—for all that is truest and finest in manhood as in womanhood.

In Memoriam

THE UNIVERSITY

Convocation Week drew a large part of Columbia's teaching force southward—the natural scientists to Washington, the modern philologists to Baltimore, the historians and economists to Philadelphia; but the same week brought to New York City and to Columbia their full share of academic visitors from all parts of the United States. Of the meetings held at the University none was more interesting than the fourth annual conference of the Association of American Universities (December 29, 30 and 31); and none brought to the University more distinguished guests. The conference was attended by more than thirty delegates, including Presidents Eliot, Hadley, Harper and Hall, Acting President Birge, Rector Conaty, and many professors who have been long and intimately connected with the development of advanced education in the United States. The sessions were held in the Trustees' Room, a place unusually well adapted, by the nobility of its design, the comfort of its fittings, its pleasant light and its good acoustic properties, to the purposes of such a gathering. If an eminent painter of portraits could have perpetuated some of the groupings there to be seen, with the background of the beautiful fire-place and mantel, the result would have been not merely a historical picture of academic interest but a work of art of the first importance.

The Association of American Universities, as at present constituted, consists of the following fourteen members: University of California, Catholic University, Chicago, Clark, Columbia, Cornell, Harvard, Johns Hopkins, Leland Stanford, Jr., Michigan, Pennsylvania, Princeton, Yale and Wisconsin. Membership and voting are by universities; the president of each university generally attends the conferences when possible, and other delegates are appointed as well.

A varied programme had been provided by the executive committee, the subjects of papers and discussion being as follows: "The certificate system of admission to colleges and universities," "The requirements for admission to professional schools," "The enlargement of membership in the Association," and "The uniformity of university statistics of enrolment and expenditure."

The papers and the ensuing discussions were in the highest degree interesting and profitable. This is perhaps least true of the first session, which was devoted to the certificate system; for although many points of value were brought out, it was generally felt that the whole matter had best have been left to the sectional associations of colleges and secondary schools, which have for many years annually wrangled over this elastic and uneasy subject. Incidentally fresh light was thrown on the radical differences in the situation between West and East, so that no general rule covering both seems as yet possible of formulation.

Particular interest attached to the second and fourth sessions. At the second, papers were presented by President Eliot of Harvard, and Professor Huffcut of Cornell, the former advocating, the latter deprecating, the requirement of a first degree for admission to the professional schools of the university. President Eliot, both in his paper and in the ensuing discussion, laid great stress on the increasing demands made on the intelligence and equipment of the professional student by the enormous development of the sciences during the last generation. Professor Huffcut opposed the requirement of a first degree chiefly on the grounds that the period of study was already unduly lengthened, and that an aristocracy of the professions would be thereby established, repugnant to the democratic traditions of education in our country. In the discussion which followed, the latter point was frequently touched upon; one speaker after another showed that an aristocracy of the professions was inevitable, unless they were to be thrown open to "the man in the street" who might elect to practise them; and President Eliot in particular pointed out that in this country there would doubtless always be professional schools unconnected with universities, following lower ideals and affording inferior advantages, so that it is incumbent on the universities to lead the way toward the best training possible, the training most nearly abreast of the constant advance in scientific knowledge. Professor Barker of Chicago, in some remarks of singular lucidity, beauty and force, developed his conception of the equipment requisite for the young man beginning the study of medicine: an education that might fairly be called liberal, including a good knowledge of literature; a certain plasticity and youthful enthusiasm, generally lost after the student's twenty-first year; preliminary training in

biology, physics and chemistry, with much more mathematics than is generally thought necessary; and a good reading knowledge of French and German. The mere acquisition of a bachelor's degree, though earned in a college of the highest rank, is not adequate because the training which it represents is so indefinite in character. Professor Barker showed that there is not yet in this country a single medical school of strictly university rank, though great advances have been made in this direction. Professor Starr of Columbia pointed out the significant fact that all the graduates of the Columbia School of Medicine who can do so secure hospital appointments, which are not at all remunerative, and make every effort to get to Germany for at least a year of further clinical instruction, thus acknowledging that six or even seven years instead of four are necessary for the proper training of a physician.

At the concluding session an elaborate paper on uniformity of university statistics was presented by the Secretary of Columbia University. Discussion of the paper was made a special order for the next annual conference, both because of the very technical character of the subject, necessitating a careful examination of the tables and figures presented before discussion could be intelligently carried on, and because an unusual opportunity was given to the conference of gaining information on the subject of the Rhodes scholarship fund. Principal Parkin of Lower Canada College, who has been empowered by the trustees of the fund to bring the subject before the educational and other authorities of the United States and the British colonies, was present by invitation of the association and gave a most interesting account of the present state of the negotiations towards carrying out the intentions of Mr. Rhodes's bequest. What Oxford has to offer, what the separate colleges of Oxford are willing to offer, and how the American beneficiaries of the fund are to be chosen—these were the topics of his informal but most illuminating remarks. He laid great stress on the necessity of keeping the appointments entirely free from improper influences. As Mr. Parkin put it:

If I were to say what the main object of the trustees is, it would be that they wish as far as possible to carry out this bequest in sympathy with local ideas and with local advice in all parts of the world. The thought which they have given me is this: that they would like to have some scheme arranged which would make the

selection of the scholars absolutely separated, as far as human device can make it, from any influence political, religious or of a race kind.

Mr. Parkin's remarks called forth some very interesting divergences of opinion concerning the type of young American best fitted to be sent to Oxford. President Eliot urged the fullest possible recognition of the fact that Oxford stands preëminently for just one thing, classical literary culture. He advocated the policy of taking advantage of this fact: of sending from here young men not over eighteen or nineteen, as thoroughly trained in Latin and Greek as is possible at that age, who should remain the full term of three years and absorb to the best of their ability all the peculiar excellences of the Oxford training. On their return these young men would show whether such a training is or is not a desirable leaven in our American life. They should go as undergraduates, as distinctly young and immature men, that there may be no mere half-way experimenting. Graduate students should be directed to Germany, as heretofore, or to France. Some of the delegates present were inclined to think this view too thoroughgoing, believing that young graduates might often be more suitable candidates, and less exposed to the danger of denationalization. The general outcome of the discussion, on which no formal action was taken, was that the execution of the Rhodes bequest presents, as regards the United States, peculiarly difficult problems, but that the ultimate value and profit to our people ought to be exceedingly great. The broad and liberal spirit, and the intelligent appreciation of the questions to be met, displayed by Mr. Parkin impressed the conference deeply, and every one present agreed that the discussion had proved most profitable.

Altogether the meetings were an unqualified success, as affording occasion for informal and unreserved exchange of views between men charged with some of the most difficult tasks in modern education. The limited size of these gatherings makes possible a form of discussion quite impracticable in larger assemblies.

* * *

The ninth annual meeting of the American Mathematical Society was held at Columbia University on December 29 and 30. At the election of officers, which took place at this meet-

ing, Professor Thomas S. Fiske was chosen president of the society for the term of two years. Professor David E. Smith was reelected as librarian and also made one of the members of the Committee of Publication. Professor F. N. Cole was reelected secretary and member of the Committee of Publication. The Society, which was originally founded at Columbia in 1888, has always maintained close relations with the University. Its regular meetings have always been held here. Five of the seven presidents have been Columbia men: Professor Van Amringe, Dr. Emory McClintock, Dr. G. W. Hill, Professor R. S. Woodward and Professor Fiske. Professor Fiske served as secretary from 1888 to 1895 and was then succeeded by Professor Cole. Professors Fiske and Jacoby founded the *Bulletin* of the Society and Professor Fiske is one of the three members of the editorial board of the *Transactions*. The University is one of the contributors to the financial support of this last journal. The library of the Society is also deposited at Columbia. The Society is, however, fully entitled to its national designation, including as it does nearly every mathematician of standing in America. Two-fifths of the members are located west of Buffalo. A section meets regularly at Chicago and Evanston, and another at Stanford University and San Francisco.

A special feature of the recent annual meeting was the address of the retiring president, Professor E. H. Moore, of the University of Chicago, "On the foundations of mathematics." Among the other papers presented were: "On the axiom of infinity," by Dr. C. J. Keyser; "The general quadratic system of conics and quadrics" and "The generalized Beltrami problem concerning geodesic representation," by Dr. Edward Kasner.

* * *

An interesting and unusual occurrence in connection with the February meeting of the Trustees was the conferring *in camera* of the degree of LL.D., *honoris causa*, upon President Andrew Sloan Draper of the University of Illinois. Arrangements had been made to confer the degree in 1902, but the terrible accident which nearly cost President Draper his life made it impossible for him to be present on Commencement Day. The degree was conferred, February 2, in the presence

of the Trustees, the University Council, and a few personal friends of President Draper. The candidate was presented for the degree by Professor J. Howard Van Amringe, Dean of Columbia College, who said:

The Honorable Andrew Sloan Draper has long been distinguished, in this country and elsewhere, for his knowledge of the principles of education, which he has elucidated in published works marked by accuracy of learning and clearness of expression; for his thorough acquaintance with the intricate and recondite subjects of educational organization and administration, in which he is an acknowledged authority, in which his rare skill has been practically shown in high official position, as superintendent of public instruction in the State of New York, as city superintendent of schools in Cleveland, Ohio, and in his present position as president of the State University of Illinois; and for a monograph on which he was awarded a medal at the Paris exposition of 1900. As a man of erudition and an author of repute in his chosen field, and as a representative educational officer, I commend him cordially to you for the honorary degree of doctor of laws, which I beg may now be conferred upon him.

President Butler conferred the degree in these words:

Andrew Sloan Draper, bachelor of laws, patriotic and courageous citizen, effective administrator of public education in three commonwealths, trusted leader and guide of public opinion, president of the University of Illinois, I gladly admit you to the degree of doctor of laws in this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

* * *

During the month of February, a number of important gifts to Columbia were announced, of which the largest was the sum of \$100,000, given by the Duc de Loubat for the endowment of a professorship of American Archæology, a subject in which he has endowed chairs in the University of Berlin and in the University of Paris. The Trustees accepted the gift, and chose as the first incumbent of the professorship, Mr. Marshall H. Saville, curator of archæology at the Museum of Natural History, and vice-president for anthropology of the American Association for the Advancement of Science. Mr. Saville's appointment ensures the carrying forward of the work of the new chair upon the highest possible plane, and will increase the coöperation, already considerable, between

Columbia University and the Museum of Natural History. Mr. Saville will enter upon his duties at the beginning of the next academic year.

Among the other gifts (of which a detailed statement will be found on p. 241, in the summary of the proceedings of the Trustees) the most considerable were \$10,000 for the endowment of a "Gustav Gottheil lectureship in Semitic languages," and an equal sum for the endowment of a "Julius Beer lecture fund," to provide for lectures to be given under the direction of the Faculty of Political Science.

* * *

An agreement from which interesting results are expected has been entered into by the Alliance Française of New York and by Columbia University. By virtue of this agreement part of the work of the Alliance will be carried conjointly with the University. Although general in character, the agreement specifies some particular lines of work as lying within the field of coöperation for the two institutions, and, among these, the establishment of examinations for the certification of teachers of the French language. It is expected that the examinations will be based as far as possible upon the examinations for the "Agrégation des langues vivantes" carried on by the University of France. The agreement also contemplates the organization of public courses of French lectures and classes for the study of French. It goes without saying that what has been done thus far in the same direction by the University, for instance the Thursday afternoon course of public French lectures, remains outside of the plan of coöperation. The financial side of the plan remains entirely in the hands of the Alliance, but the University promises to give to its partner the advantages of its publicity. It is expected also that part of the joint work will be carried on within the Columbia buildings.

The coöperative work of the two institutions will be managed by a committee consisting of the President of Columbia University, the Consul General of France in New York, the President of the Alliance Française of New York, the President of the Federation of the Alliance Française in the United States and the Professor of Romance Languages and Literatures in Columbia University. The last-named member will be *ex officio* chair-

man of the examining board to be appointed by this committee. In 1903 the committee will consist of the following members: President Butler, Consul General Soufflot de Maguy, Frederic R. Coudert, Jr., James H. Hyde, Professor Adolphe Cohn.

Either party can terminate the agreement by giving due notice three months before the expiration of any academic year.

* * *

Partly by action of the University Council, and partly by amendments to the statutes adopted by the Trustees on the recommendation of the Council, new rules have been established governing the length of the academic year and the number of incidental holidays.

Commencement Day will remain as now the second Wednesday in June, but the academic year will open thirty-seven weeks preceding commencement day, instead of on the first Monday in October as at present. Under this new arrangement, the University will open for 1903-4 on Wednesday, September 23. It is planned to have somewhat formal exercises, with an address to the officers and students, on the afternoon of the opening day. It will hereafter be in the discretion of the University Council to do away with the custom of omitting academic exercises on legal holidays. Heretofore the statutes have required a suspension of the exercises of the University on all legal holidays. It is understood to be the intention of the University Council to drop the holidays now observed on Lincoln's Birthday and on Washington's Birthday. Suspension of exercises on these days, it is believed, is desired neither by officers nor by students. It will also be in the discretion of the University Council to establish, either for the entire University or for any part thereof, an Easter recess, to extend from the evening of the Wednesday before Easter to the morning of the Tuesday following. Academic exercises are now suspended on Good Friday only. Such a recess will probably be established for Columbia, Barnard and Teachers Colleges, and possibly for all the schools on Morning-side Heights.

Under the terms of the new calendar, Columbia will have a longer teaching year than the majority of the American universities. This is due not only to the fact that the number of teaching days will be increased by the changes mentioned, but also

to the fact that Saturday is regarded throughout the University as a day for classroom and laboratory instruction.

* * *

To the University the first month of the new year brought great losses. Two of the most honored alumni of Columbia College passed away in that month: William C. Schermerhorn, of the Class of 1840, died January 1, and Abram S. Hewitt, of the Class of 1842, January 18. Both men were members of the Board of Trustees, Mr. Schermerhorn having served as its Chairman since the death of Hamilton Fish in 1893.

The funeral services of Mr. Schermerhorn were held on Sunday, January 4, at Grace Church, and those of Mr. Hewitt on Wednesday, January 21, at Calvary Church. In each case both the Trustees and the officers of the University were represented.

The Alumni Association of the College at its meeting, January 22, adopted by a rising vote the following minute:

Within a few days of each other, two of the oldest and most honored sons of Columbia have filled the measure of useful lives and gone to their exceeding great reward. Fellow students and participants alike in the scholarly and ennobling traditions and influences of the old College, they attracted to themselves, in a remarkable degree, the affectionate regard and profound respect of their fellow men.

William C. Schermerhorn, of the Class of 1840, was by nature reticent and unassertive. He was well known to comparatively few, but by them his generous and sympathetic support of all deserving philanthropic objects was always relied upon with unfailing certainty; to them were known his intelligent and deep interest in all questions affecting the public welfare, his love of music and the fine arts, of which he was a liberal patron, and his devotion to his Alma Mater, of which he was long a Trustee.

In Abram S. Hewitt, of the Class of 1842, were illustrated those sterling qualities which distinguished the alumni of King's College in the War of Independence and in the establishment of the Republic. Vigorous and aggressive in character, clear-minded and far-seeing, the strength of his convictions, his wide and accurate information, his logical and persuasive eloquence made him a leader of men and gained for him distinction as a member of Congress, as Mayor of New York and still more as, by common consent, the first citizen of this great municipality. No less attached to the College than his fellow alumnus, one of his last expressed wishes was that he might have done more for its advancement.

As educated men, Mr. Schermerhorn and Mr. Hewitt gave material proof of the value in which they held general education and sound learning: the former in Schermerhorn Hall and other benefactions, the latter in Cooper Union and in his contributions and unwearied efforts for the wider and better education of the people. They have thus left to succeeding generations of students and citizens not only the example and incentive of noble and unselfish lives, but the means whereby others may be prepared to lead them.

The funeral services of Mrs. Butler, whose death, January 10, deeply affected the entire University community, took place in St. George's Church, Stuyvesant Square, on the morning of January 12. The services were conducted by the Rev. Dr. Rainsford, the rector of the church. The pall-bearers were Professors Van Amringe, Burgess and Perry, Mr. John B. Pine, Dr. Canfield and President Hadley of Yale. Almost the entire teaching staff of the University and a large number of the students were present.

RELIGIOUS INTERESTS

Young Men's Christian Association.—The energies of the Association for the last few months have been spent primarily in furthering Boys' Club work and Bible study. The Settlement work among the boys in the neighborhood of the Speyer School has been developing most satisfactorily. In the old building only a limited amount of work could be done; but now that quarters have been obtained in the new Speyer building, the work is and can be greatly extended. Already eight clubs, with a membership of from fifteen to twenty in each, have been organized.

Mr. H. R. Mussy, a tutor in the University who was secured to manage the Settlement and to give his personal attention to its development, has been compelled to resign his position. In his stead, Mr. E. S. Whitin has been persuaded to become a volunteer worker and will reside in the Speyer building. Mr. Whitin has been deeply interested in the organization of the work and has shown his ability as a Settlement worker. He was appointed by the President of the Christian Association and his appointment was ratified by the Teachers College authorities. He will have control of the actual work. It has also been decided to appoint an advisory committee to assist the general Boys' Committee of the Christian Association. Of this

committee the superintendent of the Speyer School, the chairman of the Boys' Club Committee, the secretary of Earl Hall and the resident worker will be members. J. W. Taylor, '03, and C. R. Toy, '04, have been engaged to assist Mr. Whitin. One or more of these men will be on the grounds each evening and will direct the volunteer workers who come from the student body. Each club will be in charge of two or three students who will be personally responsible for the development of its members. It will be the endeavor of the workers to keep in view the following four objects: First, the physical beauty of the body, its development and care; second, the development of self expression; third, the development of love for some person or thing which will be uplifting; fourth, the development of open-mindedness. Each club is admitted to the Hall twice a week; one night for exercise in the gymnasium, and the other for a meeting, at which parliamentary rules and regulations are taught for one half-hour, after which the club is divided into small groups of five or six boys with a student as a leader. In this way each leader will be able to develop the second, third and fourth objects. The last half-hour of the evening is devoted to music and general singing. The Settlement work already shows encouraging results.

For Bible Study, nine classes have been organized: these have their own leaders and meet at a stated time each week. Another class conducted by Dean Hutton meets once a month, and a second class in the Law School has been organized under the leadership of Professor Burdick—subject, "St. Paul as a lawyer and a victim of the law." The enrolment in these classes is now over 100.

EARL HALL

Earl Hall has become the center of student activity in the University, and its privileges are sought by nearly every student organization. There are at present six religious organizations which are using the building. These six organizations have ninety regular meetings scheduled for each month. There are two philanthropic organizations which make occasional use of the building. Twelve of the literary societies of the University have received accommodations and have a regular schedule of forty-eight hours each month.

Among the miscellaneous organizations which make occasional use of the building there are twenty different clubs and committees. A combined list of those organizations which use the building at regular schedule hours and those which use it occasionally would include nearly every student organization of Columbia. The average number of students who come to the rooms for purposes other than attending meetings is, by door-count, over 300 per day.

THE UNIVERSITY PRESS

The Columbia University Press has published since the beginning of the academic year the following volumes:

"China and the Chinese," by Herbert Allen Giles, Professor of Chinese in the University of Cambridge, who has incorporated in the book the lectures delivered during March, 1902, at this University to inaugurate the foundation of the Dean Lung Chair of Chinese.

"The satire of Seneca on the apotheosis of Claudius," by Allan Perley Ball. This is the initial volume of the Columbia University Studies in Classical Philology.

"The indebtedness of Chaucer's Troilus and Criseyde to Guido delle Colonne's Historia Trojana," by George L. Hamilton, in the Columbia University Studies in Romance Philology and Literature.

The Press announces for immediate publication "An introduction to philosophy," by Walter T. Marvin, Instructor in Philosophy in Western Reserve University.

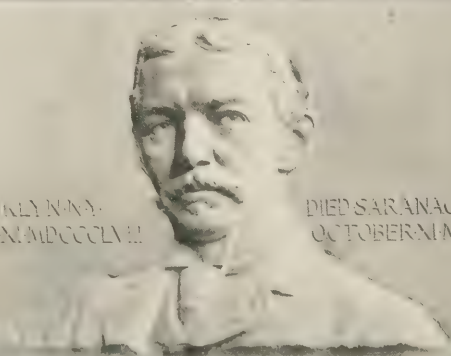
FACULTY OF APPLIED SCIENCE

General.—A bronze tablet has been erected in Havemeyer Hall to the memory of Hamilton Y. Castner, a student in the School of Mines 1875-78. Previous to the unveiling of the tablet, dedicatory exercises were held. Addresses were made by Professor Chandler, by Professor Richards of Lehigh University, and by Mr. Benjamin, a classmate and friend. A sketch of Mr. Castner's career and of his services to science will be found in the *School of Mines Quarterly*.

Department of Electrical Engineering.—At the beginning of the present year Mr. F. J. White, a graduate of the electrical engi-

BORN BROOKLYN N.Y.
SEPTEMBER M.DCCCLXII

DIED SARANAC LAKE N.Y.
OCTOBER M.DCCCXCIX



IN · MEMORY · OF
HAMILTON · Y · CASTNER
STUDIED · AT · THE · SCHOOL · OF · MINES
COLUMBIA · UNIVERSITY

FROM · SEPTEMBER · M.DCCCLXXV · TO · JUNE · M.DCCCLXXVIII

HIS · CHEMICAL · INVENTIONS

M.DCCCLXXXVI · CHEMICAL · PROCESS · FOR · SODIUM

M.DCCCXC · ELECTROLYTIC · PROCESS · FOR · SODIUM

M.DCCCXCI · MANUFACTURE · OF · ALKALINE · PEROXIDES

M.DCCCXCII · ELECTROLYTIC · PROCESS · FOR · SODA
AND · CHLORINE

M.DCCCXCII · BLEACHING · COMPOUND

M.DCCCXCIII · ELECTROLYTIC · APPARATUS

M.DCCCXCIV · ELECTROLYTIC · PROCESS · AND
APPARATUS · FOR · SODA · AND · CHLORINE

M.DCCCXCIV · PROCESS · FOR · CYANIDES

M.DCCCXCVI · GRAPHITISED · ANODES · FOR · ELECTROLYSIS

CASTNER MEMORIAL TABLET

neering course in 1902, was appointed assistant, and in October Mr. M. Arendt was appointed lecturer in the department. There have been added to the curriculum in mechanical engineering a third-year laboratory course and a fourth-year course in alternating current laboratory work. This arrangement gives the students of mechanical engineering a thorough knowledge of the electrical machinery which they will use in the practice of their profession.

By arrangement with the Department of Chemistry its excellent photometric apparatus has been made available for instruction to the engineering students. We now possess every facility for making accurate determinations of the candle power of incandescent lamps.

There have been purchased a Hartman and Braun potentiometer and three large standard Clark cells for the purpose of providing the nucleus of a standardization bureau. By the use of this apparatus and secondary standards, all the instruments and measuring devices in the electrical engineering laboratories can be kept accurately adjusted. The department has acquired a small sized storage battery which has been in constant use during the school year and has simplified laboratory methods. The standard rheostats, as devised and used by the laboratories, have been materially increased in number and capacity, facilitating thereby the operations of the laboratory. A rearrangement of the direct current laboratory has taken place in order to utilize the apparatus to the best advantage.

The following gifts have been received: from the Ward-Leonard Company, a motor starting rheostat and resistance coils; from the D. and W. Fuse Company, two large enclosed fuses; from the H. W. Johns Company, a large sample board containing different kinds of enclosed fuses; from the Bullock Electric and Manufacturing Company, an instruction board containing samples of dynamo parts, and photographs illustrating applications of electrical machinery; from the Westinghouse Electric and Manufacturing Company, the loan for test of a ten-horse power induction motor and a large oil condenser; from the Alberene Stone Company, a large table of alberene stone.

Interesting additions to the museum are two pieces of the original plaster cast of the John Fritz medal.

There has been prepared, with the coöperation of the Library, an almost complete card catalogue of the electrical literature in Columbia University. Therein is contained a record of almost all articles published in pamphlet form.

In August, Professor G. F. Sever was appointed Consulting Electrical Engineer to the Department of Water Supply, Gas and Electricity, of New York City.

Department of Mechanical Engineering.—Interesting work has been accomplished during the past year and is at present in hand in the testing laboratory of this department. Owing to the increase in the number of students and the amount of laboratory work required of them, together with the growing demand for special outside investigations, it was found necessary to furnish an assistant to Mr. Woolson, who for a number of years has conducted the work alone. Mr. Rossiter L. Waters, Mech. E., '02, was appointed to this position and is rendering very effective service.

In the early part of the year Mr. Woolson finished an extensive scientific investigation of the strength and elastic properties of the mineral jade. This work had been in progress in a desultory way for nearly two years, and was done for the late Heber R. Bishop, whose collection of rare objects wrought in this mineral is one of the finest in the world. By the terms of his will, this collection becomes the property of the Metropolitan Museum of Art. So far as is known, Mr. Woolson's investigation is the first of the kind ever conducted on such a scale. The full report of his work will be embodied in the limited edition (of one hundred copies) of a history of jade and a catalogue of his collection which Mr. Bishop had practically completed for publication at the time of his death.

About a year ago Mr. Woolson began an investigation of fireproofed woods, now largely used in tall buildings in this city. The work led to an affiliation with the Bureau of Buildings, and at present all the fireproofed woods, and many other fireproof materials submitted for use in the city, are tested here. Arrangements are made for an elaborate public fire, water and load test in this city of a fireproof floor construction. This test will be conducted by Mr. Woolson in conjunction with Professor Charles Norton of the Massachusetts Institute of Technology.

Among the recent investigations prosecuted in the laboratory is a series of over 400 strength tests made upon bricks representing the brick industry of the State of New Jersey. The work is under the direction of the New Jersey State Geological Survey, and is done in conjunction with Professor Heinrich Ries of Cornell University, formerly connected with the Geological Department of Columbia. Professor Ries is making exhaustive chemical and other tests, and the combined report will be the most complete investigation of the kind thus far produced in this country.

Parallel with these larger subjects of practical study, many minor problems are daily presented which tax the ingenuity of the operating staff and make the laboratory equipment of the department contributory to the benefit of the public.

Department of Metallurgy.—For the first time since its publication, Professor Howe's "Metallurgical Laboratory Notes" has been available in connection with the laboratory course. The regular metallurgical laboratory course of ten consecutive afternoons for the students in mining engineering was given three times this autumn. The students, about forty in number, were divided into three sets, each of which was again subdivided into squads. The publication of the book has made possible a much better arrangement of the work, greater concentration of mind on the work by both students and instructors, and economy of time; and therefore more work has been done, and better work, although the course has been nominally the same as last year.

Since the last report, the Department has added to its equipment an improved form of Moissan electric furnace, with the necessary accessories for measurement of current, *etc.*; two small Fletcher furnaces; a pair of heavy bench shears for cutting steel; a 150-volt Weston voltmeter; a delicate D'Arsonval galvanometer, for use with the Campbell autographic pyrometer; and over two hundred lantern slides and diagrams for lecture illustration.

As has been the custom in recent years, several outside metallurgists of prominence have given lectures in the regular courses. Thus, on November 20, Dr. Edward D. Peters, M.D., delivered a lecture in the course on copper, on "Pyritic smelting"; and Mr. J. Parke Channing, E.M., School of Mines, '83,

delivered a lecture to the same class on the work at the Tennessee Copper Company, where the serious problem of working economically a very low grade copper ore has been successfully solved, in large part by Mr. Channing himself. Mr. William Campbell, B.S., F.G.S., gave the same class two lectures on "The structure of copper alloys," and to the class in introductory metallurgy he gave four lectures on "The structure of metals and alloys."

A new departure has been made this year by giving a public course of evening lectures in Havemeyer Hall, under the auspices of the department. An average attendance of about fifty persons at each of the lectures thus far given seems to indicate that there is a demand for such a course. The following lectures have been delivered in the course: December 10, 1902, "The manufacture of coke in by-product ovens," by Bradley Stoughton, instructor in metallurgy; January 14, 1903, "The microscopic examination of metals and alloys," by William Campbell, Carnegie and University Fellow; January 21, 1903, "Electric furnaces in metallurgy," by H. W. Geromanos, tutor in Metallurgy; February 11, 1903, "High temperature measurements," by Irving C. Bull, assistant to the professor of Metallurgy. All the lectures were illustrated by lantern slides, and all but the first by demonstrations.

Professor Howe has been elected honorary member of the British Institution of Mining and Metallurgy.

THE FINE ARTS

General.—The public lectures on the fine arts have continued to draw large audiences, filling the amphitheater of Havemeyer Hall at times to its fullest capacity. The courses announced in the last QUARTERLY were followed by a course of five lectures on sculpture, and this by a course on Greek industrial and minor arts. The subjects, dates and lecturers were as follows: Monday, December 8, Dr. A. L. Jones on "Some practical applications of the principles of æsthetics"; Monday, December 15, Mr. E. R. Smith on "The relation between sculpture and architecture"; Fridays, January 9 and 16, Professor C. H. Young on "Greek sculpture"; Friday, January 23, Professor Young on "Greek costume"; Monday, February 2, Mr. M. K.

Kress of the School of Architecture on "Greek vases"; Mondays, February 9 and 16, Professor J. R. Wheeler on "Greek vase-painting"; Tuesday, February 24, Professor Wheeler on "Attic grave monuments." The lectures for March will be chiefly on Roman art.

School of Architecture.—Mr. W. T. Partridge, who has been for the past nine or ten years connected with the school as assistant and lecturer in architecture, has entered into partnership with Mr. Ackerman of the late firm of Ackerman and Ross, for the practice of his profession, and has been in consequence obliged to give up all his afternoon work as teacher of design in the second and third classes. Mr. A. H. Gumaer, a graduate of the School in the class of 1897, is acting as his substitute with the second class, and Mr. W. E. Parsons of the class of 1898 as his substitute with the third class.

The students of the second class have completed their six weeks' course in modeling under Mr. E. R. Smith, of the Avery Library. This course was made auxiliary to the courses in the history of mediæval architecture and ornament, each student executing first a number of examples of Gothic decorative detail and then one or more studies of Gothic vaulting. The results accomplished have been extremely interesting and, indeed, remarkable, considering the shortness of the course.

In pursuance of certain changes projected by Professor Hamlin in the drawing-courses, it is the intention hereafter to begin the work in drawing from the cast, both in pencil and in charcoal, during the second half of the first year, and to give the instruction in water-colors, heretofore assigned to the first half of the second year, in the second term of the first year, in connection with the afternoon work in architectural draughting under Mr. Harriman. By this change it may become possible to advance the pen-drawing from the third into the second year, and thus to leave the third and fourth years free for advanced work from the antique and from life.

In accordance with a suggestion made last summer by President Butler, the fourth-year class was given, as one of its problems in advanced design, the architectural treatment of the South Field. The programme prepared by Professor Hamlin and Mr. Hornbostel for this problem supposes the Univer-

sity to have acquired the South Field and also a plot of ground sufficient for a President's house on the south side of One Hundred and Fourteenth Street, in the center of the block. Sufficient space is to be reserved for an ample foot-ball field and race-track; an open vista is reserved from the President's house to the Library; the street frontages of the Field are devoted to college and dormitory buildings; and the drawings are required to show a part of the present University grounds, in order to display the architectural relation of the South Field design to the rest of the University grounds and buildings. The programme supposes further that in the future, should the growth of the University render necessary the sacrifice of the foot-ball field on this site, a broad avenue through the center shall be reserved, giving a vista between the President's house and the Library, to which it will furnish a dignified approach. There will then remain two grassy quadrangles, one on either side of this avenue, each surrounded by University buildings. The designs submitted by the students show a considerable variety of treatment, and besides their value as exercises in monumental planning on a large scale, they are valuable as suggestions of the splendid possibilities of this property.

Mr. Hornbostel's interesting designs for the architectural embellishment of the new Williamsburgh bridge over the East River, and for the whole architectural treatment of the Blackwell's Island bridge, have been approved both by the advisory commission of engineers appointed by the Mayor, and by the Municipal Art Commission.

Professor Hamlin has been appointed consulting architect to conduct a competition for the new municipal hospital in Jersey City. He lectured on Monday, January 19, before the Friday Afternoon Club at Plainfield, New Jersey, on "The architecture of India," and addressed the New Jersey Chapter of the American Institute of Architects on January 22 at Newark on "Style in modern work."

SCHOOL OF LAW

The old Alumni Association of the Law School, which was organized in 1860 by the members of the first graduating class but which had displayed no signs of vitality since 1872, has recently

been revived by the graduates of the school. It has been reorganized by the election of the following officers. President: Hon. E. Henry Lacombe, '65. Vice-Presidents: George Van Nest Baldwin, '60; Richard H. Greene, '65; Julien T. Davies, '68. Treasurer: William Parmenter Martin, '92, 120 Broadway. Secretary: William T. Mason, '97, 63 Wall St. Standing Committee: Henry E. Tremain, '67; George W. Kirchwey; John McLean Nash, '70; John B. Pine, '79; Henry B. Corey, '84; Charles T. Terry, '93; Frederic R. Coudert, Jr., '94; Henry G. Villard, '94; Edward R. Finch, '98; Roberts Walker, '99; William Underhill Moore, 1900; Benjamin R. Curtis, 1901.

In its constitution, as recently revised, the objects of the Association are stated as follows: "To revive and perpetuate by meetings, public exercises and other suitable means the memory and good feeling of those who have participated in common labors, common pleasures and common benefits in their preparation for the legal profession; to promote the interests of the Law School and of the University, and to cultivate social intercourse among the Alumni." Membership in the Association is elective. All graduates of the Law School, all persons who have been students in the Law School for not less than one year and whose classes have graduated, and all present and former officers of the Law School are eligible to active membership, and may be elected to such membership by the Standing Committee.

FACULTY OF MEDICINE

General.—The following resolution was recently adopted by the Faculty of Medicine, and after being properly engrossed and signed by all the members was presented to Professor Jacobi.

Upon the acceptance of the resignation of Abraham Jacobi, M.D., LL.D., Professor of Children's Diseases at the College of Physicians and Surgeons, the Medical Department of Columbia University in the City of New York, we, the Faculty of the College, desire to express our appreciation of his long continued and earnest labors both as a teacher and as a scientific physician.

During the past thirty years Professor Jacobi has devoted his best energies to the instruction of our students in the Clinic for Children's Diseases and in the hospitals of this city. His power as an accurate diagnostician, able therapist, and eloquent lecturer has held the attention and aroused the enthusiasm of his pupils; and his scientific attainments, strong personal character,

and public spirit, have secured the respect and admiration of his colleagues and of his profession all over the world.

In recognition of the eminent services which he has rendered to our College and to scientific medicine, we tender to him our congratulations upon the noble success of his labors, and express the sincere hope that he may live many years to enjoy the well merited rewards of his professional achievements.

Proudfit Fellowship.—On the basis of the fund bequeathed to the University by the late Alexander Moncrief Proudfit, of the Class of 1892, a fellowship in medicine has been established. It will be distinctly a research fellowship, offered to graduates of the Medical School for the purpose of enabling them to pursue advanced study and research in internal medicine, either in this country or in Europe. It will be awarded every fourth year, and will be tenable for two years. The value of the fellowship to the holder will be \$1,200 annually.

Summer Courses.—An important extension of the work of the College of Physicians and Surgeons is about to be inaugurated by the establishment of summer courses. This has long been under advisement, and will first be realized during the coming summer by the giving of practical courses in the various departments.

Instruction will be given in general medicine by Drs. Sumner and Draper; in neurology by Drs. Pearce Bailey and Cunningham; in gynecology by Drs. W. S. Stone and Bradley; in obstetrics by Dr. Lobenstine; in ophthalmology by Drs. Claiborne, Holden and Tyson; in laryngology by Drs. Simpson and Frothingham; in dermatology by Drs. Hodgson and Dade; in diseases of children by Drs. La Fetra and Huber; in genito-urinary diseases by the senior assistants in the department; in diseases of the stomach and intestines by Dr. Fischer; in clinical pathology by Dr. Jessup; and in physical diagnosis by Dr. Dow. Each course continues for a period of from three to five weeks, and the work will be adapted to the needs of undergraduates of the third and fourth years, and of practitioners of medicine who desire to pursue further special studies. The splendid equipment of the College, the Vanderbilt Clinic and the Sloane Maternity Hospital will thus not be allowed to remain unused for purposes of instruction during the long vacation. A circular giving full information regarding these courses may be obtained from the Secretary of the University.

Department of Genito-Urinary and Venereal Diseases.—Dr. Robert W. Taylor has resigned as visiting physician to Bellevue Hospital, and has been appointed consulting physician. Drs. J. R. Hayden and J. R. Whiting have been appointed visiting physicians to Bellevue Hospital.

Department of Neurology.—Dr. Pearce Bailey has been appointed consulting neurologist in Roosevelt Hospital. This will enable the department to offer a new clinic of bedside instruction in nervous diseases to the Senior class in sections. Dr. R. H. Cunningham is assisting Dr. Bailey in the teaching of sections in the Vanderbilt clinic.

FACULTY OF POLITICAL SCIENCE

An unusually large and interesting meeting of the Academy of Political Science was held December 12. The chief address was delivered by Hon. Horace Plunkett, who described the radical innovations in agriculture in Ireland that have been effected through a movement which he inaugurated. The address was discussed briefly by Mr. W. H. Baldwin, Jr., and at some length by Hon. Bourke Cochran, whose interpretation of Irish history was very eloquent and very entertaining.

The meeting of the American Historical Association at Philadelphia during the Christmas vacation was participated in by Professors Osgood, Dunning and Sloane, Dr. Garner, Mr. Shotwell and Mr. Fleming of the Department of History. The American Economic Association, which met at the same time and place, enlisted the participation of Professors Clark and Seager and Mr. A. S. Johnson of the Department of Economics, in addition to Professor Seligman, who, as president of the Association, opened the meeting with an address on "Economics and social progress."

Professor Seligman debated the question of socialism with Mr. Wilshire before a large audience at Cooper Union, January 16. Professor Osgood has been appointed by the Mayor to serve on a committee which is to make arrangements for the celebration of the two hundred and fiftieth anniversary of the institution of municipal government in New York City. Professor J. H. Robinson left on January 28 for a sabbatical absence of half a year. He will travel extensively in the West

and in Japan, and will deliver short courses of lectures at the University of Wisconsin and at the University of California.

FACULTY OF PHILOSOPHY

General.—The Division of Modern Languages and Literatures held its first meeting on January 24, 1903, and organized by electing Professor Adolphe Cohn, Chairman, and Professor George R. Carpenter, Secretary.

At the session of the Modern Language Association of America, which was held at Johns Hopkins University December 29, 30 and 31, 1902, papers were read by Professor Cohn on "The authorship of the *Paradoxe sur le Comédien*," and by Professor Todd on "The Old-French versified apocalypse of the Kerr manuscript." A paper was read also by Mr. A. François Monod, traveling Fellow of the Ministry of Public Instruction of France, on "The preparation of modern language teachers for the French Lycées." At the same session Professor Todd was appointed a member of a newly organized committee on the "Amelioration of English spelling," and was reelected chairman of the committee on bibliography of the association.

Department of Comparative Literature.—Several additional volumes of the Columbia University Studies in Comparative Literature will appear in the spring. The first number of a new quarterly, *The Journal of Comparative Literature*, edited by Professor Woodberry and Dr. Spingarn, in conjunction with Professor Fletcher of Harvard, was published in January.

Department of Germanic Languages and Literatures.—A new enterprise which has distinctly proved its *raison d'être* is the Germanic Journal Club, composed of the officers, fellows and scholars in the department. Its object is to bring to the notice of the members all articles of interest in the field of Germanics which appear in the various current periodicals. Its method is one of division of labor. Informal meetings are held every first and third Monday in the month. The officers are: President, Professor Carpenter; Vice-president, Professor Thomas; Secretary, A. F. J. Remy; Executive Committee, Professor Carpenter *ex officio*, W. A. Hervey and F. W. J. Heuser.

The department library, with a nucleus of about 600 vol-

umes, is continuing to fill a great need. With characteristic generosity Heinrich Conried, A.M., Director of the Irving Place Theater, is aiding its increase, by placing at the disposal of the department a number of tickets for several of the classic performances. The proceeds from the sale of these go to the library fund.

The usual series of public lectures in the German language is being given. The dates and titles are: January 14, Heinrich Conried, A.M., Director of the Irving Place Theater, "Die Errichtung eines nationalen Theaters"; January 21, Mr. Joseph Winter, Secretary of the Deutscher Gesellig-Wissenschaftlicher Verein, "Fulda, Hauptmann und Sudermann"; January 28, Leopold Bahlson, Ph.D., Teachers College, Columbia University, "Der deutsche Kaiser und die deutsche Schule"; February 4, Mr. Udo Brachvogel, "Nikolaus Lenau"; February 11, Emanuel Baruch, M.D., "Richard Wagner als Dichter"; February 18, Friedrich Hirth, Ph.D., Dean Lung Professor of Chinese, Columbia University, "Chinesische Aufzeichnungen über das Römische Reich im Altertum"; March 4, Mr. Georg von Skal, Editor of the *New-Yorker Staats-Zeitung*, "Friedrich der Grosse und die Vereinigten Staaten von Amerika"; March 11, Rev. August Ulmann, S.T.D., Rector of Trinity School, "Karl der Grosse und seine Söhne"; March 18, Ludwig B. Bernstein, Ph.D., De Witt Clinton High School, "Ein interessantes Kapitel aus der deutschen Volkskunde"; March 25, Rudolf Tombo, Sr., Ph.D., Germanic Department, Columbia University, "Fritz Reuter."

Of the members of the department, Professor Carpenter represented the University at the installation of the new president of Indiana University, William Lowe Bryan, January 20 and 21; Professor Carpenter and Dr. R. Tombo, Jr., are on the committee to take charge of the University exhibit at the St. Louis Exposition; and the latter was a delegate of the University at the December meeting of the Association of American Universities. In the wider sphere of University influence the activity of the department has been as follows: In November Professor Thomas delivered a German lecture before the Gesellig-Wissenschaftlicher Verein of New York, on "Emersons Verhältnis zu Goethe." This paper will appear in the next volume of the *Goethe-Jahrbuch*. On January 30, he lectured

on Goethe at the Woman's College in Baltimore. Mr. W. A. Hervey is conducting a series of extension courses in Teachers College and a course in German under the auspices of the Brooklyn Institute of Arts and Sciences. Dr. R. Tombo, Jr., is delivering lectures on "Goethe" and "Goethe's Faust" in the public schools and in Judson Memorial Hall. Mr. A. F. J. Remy has written an account of the meeting of the Modern Language Association at Baltimore for the *Pädagogische Monatshefte*. At this meeting E. A. C. Keppler read a paper on "America in German student and popular poetry."

Department of Romance Languages and Literatures.—During the summer session of 1903 the department will offer three new courses; two in French, sAb, equivalent to the second half of Course A in Columbia College, and s2a, equivalent to the first half of Course 2 in the College; and one in Spanish, s1b, equivalent to the second half of Course 1 in Columbia College. The total offer of the department in the summer session will consist of six courses. They will be conducted by Messrs. Loiseaux and Jordan.

Armand Colin and Company, of Paris, have just published "La Religion dans la Société Américaine," by Henry Bary. The volume is dedicated to Professor Cohn. On January 31 Mr. Bary lectured before the Alliance Française of Boston, on "La Chanson Française."

Professor Léopold Mabilleau, whose visit to the United States in 1902 is well remembered, will deliver in March, 1903, a new course of four lectures under the auspices of the department.

By decision of the Ministry of Public Instruction of France Mr. J. D. Fitz-Gerald has been appointed "Elève Diplômé de l'Ecole des Hautes Etudes (Section des Sciences Historiques et Philologiques)." This is the highest distinction conferred by the school. In partial fulfilment of the requirements for this appointment, Mr. Fitz-Gerald presented, as a dissertation, a critical edition of "La Vida de Santo-Domingo de Salos," by Gonzalo de Berceo. In their report on this edition Professors Gaston Paris and Antoine Thomas express themselves as follows: "En résumé les commissaires soussignés sont d'avis que la thèse de M. Fitz-Gerald est tout-à-fait digne du diplôme et qu'une fois imprimée elle constituera un monument philologique de nature à faire honneur à notre Ecole." Mr. Fitz-Gerald's dissertation will appear in the official publications of the Ecole des Hautes Etudes.

FACULTY OF PURE SCIENCE

Department of Astronomy.—Professor Rees has been granted leave of absence on account of illness, and the department is temporarily in charge of Professor Jacoby. Professor Charles Lane Poor, until lately at the Johns Hopkins University, has been appointed Lecturer in Astronomy for the rest of the academic year. One-half of Professor Rees's undergraduate lectures are being given by Professor Poor, and the others by Professor Jacoby. Dr. Mitchell, in turn, has taken one of Professor Jacoby's lecture courses. In this way it has been possible to continue class-room work with the least possible interruption of the graduate and research branches.

Professor Jacoby hopes to begin this winter the printing of a photographic catalogue of stars within two degrees of the south pole, and it is expected that within a year this work will be finished for both poles. The north polar part is being done at Vassar College Observatory, in coöperation with Columbia; and the Carnegie Institution has just appropriated a fund sufficient to pay the expenses at Vassar.

The following papers were presented by officers of the department at the Washington meeting of the American Astronomical Society in December: "Comparison of photographic measures made with the *Réseau* and without it," by Professor Jacoby; and "The new gases Neon, Argon, Krypton and Xenon in the chromosphere," by Dr. Mitchell.

Department of Botany.—During January and February Professor Underwood has been in Jamaica studying the ferns of that island; and in March he will make similar studies in Cuba.

An extensive series of charts, illustrating morphological and adaptive features of plants and the comparative characters of related forms, has been prepared by Dr. Curtis. Carefully selected and preserved specimens, with explanatory labels, are mounted on stiff cardboard and covered with sheets of transparent celluloid. These charts have proved of great value; they make it possible to bring before the students several examples of a group instead of a single type, thus preventing false generalizations.

Mr. H. D. House, a graduate of Syracuse University, has been appointed Assistant in Botany. He is engaged in preparing a series of microscopical and morphological preparations to be used for demonstrations in the various courses offered by the department.

Mr. W. A. Cannon, fellow in Botany of last year, has completed his dissertation on the "Hybrids of cotton," and has reached exceptionally interesting and important conclusions. He is the first to demonstrate that the maturation of pure races and fertile hybrids is identical. This fact gives a cytological basis for explaining the well known variation of hybrids noted by Mendel. Applying the Mendelian law* to the ferns and mosses we thus have a satisfactory explanation to offer for the apparent lack of hybrids among the sexual generations of ferns (*i. e.*, in the prothallia) and of the mosses and hepatics (*i. e.*, in the plants themselves). Further application of this discovery to the homosporous diœcious ferns furnishes the first rational conception of the genesis of heterosporry.

Department of Geology.—During the past half-year the following additions to the collections have been received by the Geological Department:

The economic museum has been enriched by the following gifts: excellent specimens of bituminous, anthracite and basaltiform coal, from the mines of the Colorado Fuel and Iron Company, near Cerrillos, New Mexico, collected by Mr. D. W. Johnson through the courtesy of Mr. G. J. Johnson, superintendent of the Madrid mines; about one hundred dollars' worth of platinum nuggets from British Columbia, given by the S. S. White Dental Manufacturing Company (these nuggets are rich in chromite, some of them enclosing the original olivine and augite crystals); large specimens of covellite from Butte, Montana, given by Mr. R. H. Sales, '00; specimens of native gold in a quartz vein from the North Star mine, Grass Valley, California, given by Mr. G. F. Sherman, '94; a series of silver and gold ores from the Camp Bird mine, Colorado, given by Mr. H. A. Titcomb; and a large collection of ores and rocks, mostly American, given by Mr. H. A. Wheeler, of St. Louis.

* *Cf.* the account of Mr. Sutton's investigations, reported by the Department of Zoölogy, pp. 229, 230.

The palæontological museum has received many Niagara fossils from Niagara Falls, New York; a collection of Hamilton fossils, containing many types and a large suite of Lower Carbonic fossils from Nova Scotia—all presented by Professor A. W. Grabau.

The petrographical museum has received an excellent series of nepheline-syenites from Tamaulipas, Mexico, given by Professor J. F. Kemp and Mr. G. I. Finlay; a fine suite of andesites, peculiar syenites and basalts from the Cerrillos Mountains, New Mexico, given by Mr. D. W. Johnson, and an additional series of rocks from the Leucite Hills, Wyoming, presented by Professor W. C. Knight, of Laramie.

The Lower Helderberg fossils from Becraft Mountain, New York, have been identified and installed in their places in the palæontological museum. The tables and wall cases of this laboratory have been supplied with electric lights, and many other improvements have been effected.

Nine members of the department attended the meeting of the Geological Society of America held at Washington, D. C., this winter. Professor J. F. Kemp presented a joint paper by Professor W. C. Knight and himself on the geology of the Leucite Hills, Wyoming. Professor A. W. Grabau presented two papers, one on the geology of Becraft Mountain, New York, and the other on palæozoic coral reefs, with notes on the classification of limestones. Mr. G. I. Finlay presented a joint paper by Professor J. F. Kemp and himself on the nepheline-syenite area of San José, Tamaulipas, Mexico.

Mr. Fred Moffit, fellow in Geology, left for Santiago, Cuba, January 15, to perform the field-work for his Ph.D. dissertation.

Department of Mathematics.—At the annual meeting of the American Mathematical Society, held at Columbia University during the Christmas holidays, Professor Fiske was elected president of the society to succeed Professor E. H. Moore of the University of Chicago, who has been president during the past two years. The re-election of Professors Cole and Smith as secretary and librarian respectively, and the papers presented by Dr. Kasner and Dr. Keyser, have been noted above (p. 205).

Mr. David H. Pollard has resigned the position of assistant in the department in order to accept a position in a preparatory school at Norwalk, Connecticut. Mr. Maurice J. Thompson, a graduate of Rutgers College, has been appointed to fill Mr. Pollard's unexpired term.

Mr. Carl Gundersen, who for a time held a university fellowship in mathematics and in 1902 received from Columbia University the degree of Doctor of Philosophy, has been appointed Professor of Mathematics at La Grange College, La Grange, Missouri.

Department of Physics.—Appropriate mention of the death of Professor Rood, and of his work as head of this department and for science in general, has already been made in the preceding number of the QUARTERLY. In the necessary readjustment of the work of the department, Professor Hallock has taken charge of the two advanced courses, Physics 2 and 4, and Dr. Tufts gives all the lectures in Physics 1, the course in general physics for the Applied Science students. To satisfy the need for more detailed instruction in Physics 1 than could be given by lectures, the class has been divided into six sections, each of which meets once a week for recitation, the recitations being conducted by Dr. Tufts, Mr. Pegram, and Mr. Tolman. Mr. Parker took charge of the first half-year's work in Physics 3 (a course for the second year students in electrical and mechanical engineering), and delivered lectures on the theory of electrical measurements, preparatory to the laboratory work of the second half-year.

Dr. Bergen Davis, Tyndall fellow in physics, is spending this year in the Cavendish Laboratory of Cambridge University, England, investigating the discharge of electricity through gases. An account of work in this field done by him last year in the laboratory of the University of Göttingen, appears in the February number of the *American Journal of Science*.

The department shop has been moved into a very desirable room on the first floor of Fayerweather, and the larger part of this year's appropriation to the physics laboratories has gone into its equipment. A new lathe, upright drill, circular saw and emery grinders have been purchased, and the stock of wood-working and machinist's tools has been much enlarged. A number of pieces of new apparatus for the lecture cabinet have been constructed,

among which a galvanometer, set up in the large lecture room of the department, is worthy of mention. Its sensitiveness can readily be varied up to that of the galvanometers used in the best equipped testing laboratories, yet its deflections, on a scale 400 cm. long, can be read without effort from any seat in the room.

Professor Joseph J. Thomson, Cavendish Professor of Experimental Physics in the University of Cambridge, has declined the professorship of Physics and directorship of the Phoenix physical laboratories in Columbia University. In his response he expresses at length his warm appreciation of the high honor paid him by the Trustees of Columbia, and his regret that the personal ties, too strong to be broken, which bind him to Cambridge will prevent his acceptance of an offer, "the remembrance of which," he writes, "will be a pride and pleasure to me as long as I live."

Department of Zoölogy.—The Zoölogical Seminar, which is held regularly in the second half-year, will be of an unusually wide scope during the present year, the subject selected being "Heredity in the Light of Modern Experimental Research." There will be eleven sessions, and those who will take part include not only the members of the Department of Zoölogy, but also Professors Boas and Farrand of the Department of Anthropology, Professor MacDougal of the Department of Botany, Professor J. Mark Baldwin of the Department of Psychology at Princeton, Dr. A. G. Mayer of the Brooklyn Institute, and Professor T. H. Morgan of the Department of Biology at Bryn Mawr.

At the meetings of the scientific societies in Washington during convocation week, nine papers from the Department of Zoölogy were read by Professors Osborn, Wilson and Dean, Dr. Calkins, Dr. Strong and Dr. Crampton. Of these the one that perhaps has the widest bearing was read by Professor Wilson before the American Association for the Advancement of Science, and was based on the results of an investigation by Mr. W. S. Sutton, the holder of a University fellowship in zoölogy during the past year. This research has yielded results of great importance for the interpretation of the Mendelian law of heredity. This remarkable law, discovered by Gregor Mendel, a Catholic priest, in 1865, was overlooked by Darwin and by others, and only within the past three years

has it been rediscovered and confirmed. It is now attracting widespread attention, and promises to inaugurate a new era in the study of variation and heredity. It now seems probable that the physical basis of the law has been discovered by microscopical researches on formation of the germ-cells, of which those of Mr. Sutton must be reckoned as among the most important thus far carried out.

Professor Wilson has received leave of absence for the second half of the year, in order to carry on investigations at the Zoölogical Station at Naples. During the past summer his researches on experimental embryology and cytology yielded results of such interest that he applied for and received a grant from the Carnegie Institution to enable him to continue these researches at Naples, where he will remain from February until June or July. He will then visit some of the marine laboratories on the French and English coasts, and also a number of German university laboratories, returning to America in September. Several graduate students in the department are carrying on investigations on the material collected by Professor Wilson last summer, and it is hoped that much additional material for work along the same lines will be secured at Naples.

Professor Dean, who will act as head of the department during Professor Wilson's absence, reports a number of interesting additions to the teaching collection obtained from correspondents in Japan and Chile. Embryological material from Misaki, Japan, is now in the hands of Mr. R. T. Osburn, one of the university fellows in zoölogy, who expects to make it the basis of his dissertation.

Dr. Calkins has recently been appointed consulting biologist to the New York State Pathological Laboratory. He will undertake a critical examination of the supposed parasite of cancer and will endeavor to determine its life-cycle by means of experimental graftings upon lower animals and plants. Dr. Calkins will have for a colleague in this general field of work Dr. H. R. Gaylord, who is in charge of the State Pathological Laboratory at Buffalo, and who has already advocated convincingly the parasite theory of the disease. To the department it is a source of legitimate satisfaction that a study of

this kind, which brings a typical research in pure science in close contact with applied medicine and in so important a field, should be carried on in a Columbia laboratory.

Another research by a graduate student, Mr. Naohidé Yatsu, scholar in zoölogy, is nearing completion, and will prove of considerable general interest. During his summer studies at Woods Hole, Mr. Yatsu experimented extensively with eggs of the starfish and caused them to develop when etherized without union with sperm: he discovered, however, in his material that an egg nucleus would sometimes unite with the second polar body, itself a rudimentary egg, and that embryos could be reared from this egg-fertilized egg.

BARNARD COLLEGE

Department of Botany.—Dr. Tracy E. Hazen has been appointed for the remaining portion of the academic year to continue the courses formerly given by Miss L. B. Dunn, in whose death the department has suffered a great loss. There has, however, been no other change in the work.

The extension of the laboratories, which now occupy the whole of the third floor of Brinckerhoff Hall, has greatly improved the facilities of the department. This year, indeed, it would have been impossible to accommodate the students in the original laboratories. A special heating apparatus for the conservatory is also about to be put in, which will maintain an approximately constant temperature and one favorable for the growing of plants in that room. This is a much needed improvement for the work in plant physiology, which has been hampered by uncertain variations in temperature. The new dark room, primarily for ætiolation experiments, but also available for photographic work, is proving itself exceedingly useful in many ways.

From the Barnard Botanical Club a sum of money has been received, with which some very necessary additions have been made to the departmental reference library.

Department of Mathematics.—The subjects of the first elective courses, 1 and 2, have been changed so as to cover the elements of analytical geometry and the calculus. This change enables students who enter without advanced mathematics to

begin the calculus in the Sophomore year and to devote the remaining two years to the more advanced courses.

The title of a paper read by Dr. Kasner before the American Mathematical Society is noted above (p. 205) in the account of the meeting of the society.

Among the essays for final honors at present in preparation may be mentioned one on the development of the concept of number, by Miss M. C. Latham, and a study of the original edition of Descartes' Geometry (secured by the University Library last year) by Miss E. B. Newton. There are seven candidates for Junior honors and five for Sophomore honors.

Department of Philosophy.—During the academic year 1901-02, 49 students were taking the required courses in the Department of Philosophy and Psychology; this year the number is 75. Against 40 students in the elective courses of this department last year there are registered for this year 140. These are distributed, in part, as follows: Philosophy 1 (History of Philosophy), 22; Philosophy 2 (Ethics), 48; Philosophy 9 (Logic), 40; Psychology 10 (the new course in Analytic Psychology), 18.

Department of Physics.—The Department of Physics has recently added to its apparatus a fine quadrant electrometer having the improvements devised by Professors Ayrton, Perry and Sumpner. The Rowland concave-grating spectroscope belonging to Barnard College, which has heretofore been mounted in Fayerweather Hall owing to lack of room at Barnard College, will shortly be set up in the room reserved for it in the new quarters of the Department of Physics, Fiske Hall.

TEACHERS COLLEGE

Whittier Hall.—In connection with the agitation for dormitories for Columbia College, it may be of interest to note the success of the dormitory in another portion of the University. Whittier Hall, the dormitory for women students of the University, is now in its second year. The building is owned by the Morningside Realty Company, but the responsibility for its administration has been delegated to the Dean of Teachers College. The resident Head of the Hall has the direction of all matters except the dining-room, where her relation is advisory only, this department being

in the hands of a separate manager directly responsible to the Dean. The Directress of Teachers College is also resident in the Hall and, with her assistant, has the especial supervision of the younger students.

The Hall adjoins Teachers College on the east. It is a handsome, fire-proof building, ten stories in height, specially designed and constructed for students' use. Every room is outside, and the arrangement is such that rooms may be rented singly or in suites of two or three. There is also a limited number of suites consisting of two rooms and private bath. The building is heated by steam and lighted by electricity. There is complete telephone and elevator service, a system of shower, needle and tub baths on each floor, and a steam laundry equipped with all modern machinery. The general parlors of the building are on the first floor. Of these, the Green Room contains a grand piano and an orchestrelle, and provides a place for dancing; the Red Room holds a few shelves of books, and is the common sitting-room. There are also two small parlors and a pleasant foyer. The main offices are on this floor, as are also the private apartment of the Head of the Hall. The next seven floors are taken up by bedrooms, with a small sitting-room on each floor. The four large dining rooms and two small restaurants are on the ninth floor, and the kitchens are above them, under the roof.

The household is a varied one. The majority of the residents are Teachers College students: but there are also students from Barnard College, awaiting the building of their own dormitory; a number of women doing graduate work in other departments of the University; several instructors and officers of Teachers College and the Horace Mann School, and a large number of professional and business women not connected with the University—writers, artists, teachers, secretaries, and thirty-five trained nurses.

To help bind these many elements into an harmonious whole, a self-government association was formed last autumn, under the name of the Whittier Hall Association. The officers consist of a house president, a secretary, and an executive committee composed of one or two representatives from each floor. This committee meets regularly in conference with the Advisory Committee, consisting of the Head of the Hall, the Directress and her

assistant; and at stated times the House President calls meetings of the entire association, when all matters of importance to the house as a whole are brought up for discussion and decision. Besides the passing of regulations concerning the general conduct of the life in the house, the committee has in charge, through sub-committees, the posting of information concerning churches, lectures, art exhibitions, the opera, plays, and places of interest in and about New York City; it supplies the house with magazines, purchased by levying a small tax upon each resident; it maintains the daily devotional service for the house; it arranges the house dances, receptions and teas, and in all ways seeks to promote the happiness and welfare of the residents. Among the social events that have been undertaken already by the committee are the parties on All-hallowe'en, Thanksgiving and Christmas, and two "short and early" dances. These gatherings are occasionally varied by music by some member of the household or outside friend, and on two occasions there have been short talks. One evening Miss Pettee and Miss Stone told of their work among the mountain whites of Kentucky; and on another evening Rev. Edward Ware, of Atlantic University, spoke on work among the negroes. Following these gatherings, on Sunday evenings, are two Bible classes, which meet at eight o'clock. These classes are under the auspices of the Phillips Brooks Guild of Teachers College, which has an attractive room on the eighth floor. At all times this room is open to all residents of the Hall. The Zeta Theta Pi and Delta Sigma fraternities also have their headquarters in the Hall. The Whittier Hall Orchestra deserves mention among the social factors of the dormitory life. This comprises seven mandolins, three violins and three guitars, and will be increased in number shortly. Early in December the Orchestra played several numbers at an entertainment given in the interest of the Phillips Brooks Guild and did most creditable work.

Two of the most important elements of the household life are the house-nurse and the infirmary. The value of these to the general welfare is inestimable, and the good average health is undoubtedly due to the means thus provided for preventing slight illness from becoming serious. These, as well as many other things that make the Hall desirable as a living-place, are supplied by the kindness of interested friends outside.

Department of Secondary Education.—Upon the requisition of the department there have been added to the Bryson Library a number of recent German publications that illustrate the "reform method" of language teaching in German secondary schools, and two comprehensive works by Klöpfer, "Englische und französische Real-Encyclopädie."

General Notes.—Mrs. Ella A. Richards, one of the chemists on the Massachusetts State Board of Health and a lecturer in domestic science at Teachers College and the Massachusetts Institute of Technology, has just arranged in the Educational Museum an exhibit in model housekeeping.

The Teachers College committee to arrange the educational exhibit for the St. Louis Exposition consists of Professor David E. Smith of the Department of Mathematics, chairman; Frank A. Parsons of the Department of Fine Arts in the Horace Mann School, Louis Rouillion of the Department of Mechanical Drawing, and Clyde Furst, the college secretary.

In addition to the extension courses in Brooklyn and in Newark, established in the early part of the year, there are now in progress extension courses at the Jersey City High School, with lectures by Professor McMurtry, of the Department of Elementary Education; at the New York Normal College, with lectures by Professor Thorndike, of the Department of Educational Psychology; at the New York City College and at the Brearley School, with courses by Dr. Bahlsten, Lecturer on Methods of Teaching French and German.

A series of free public concerts and lectures on Wednesday afternoons at the College has been well attended and much appreciated. The lecturers have been: Hon. Samuel T. Lindsay, Commissioner of Education for Porto Rico, who spoke on educational conditions in that island; Dr. Frederick H. Sykes, of the American Society for the Extension of University Teaching, who lectured on Thomas Carlyle; Dr. Wallace Buttrick, secretary of the General Education Board, who spoke on the work of that body; Dr. Walter L. Hervey, examiner for the Board of Education, New York City, who spoke about teaching in the New York public schools; and President Charles W. Dabney, of the University of Tennessee, who spoke on the rural schools in the South.

The following members of the Faculty have recently delivered addresses: Dean Russell, at Cornell University, on "The aims of secondary education"; Professor Wood, at Mt. Holyoke College, on "Health and human efficiency"; Professor Monroe, at Vassar College, on "The rise of the modern school"; Professors McMurry and Richards, at a meeting of the Association of Superintendents of Virginia Schools, on "Elementary education" and on "Manual training"; Professor Sachs, at a meeting of the Connecticut Association of Classical and High School Teachers, at Hartford, on "Problems of secondary education." Professor Lloyd addressed the Society for the Preservation of Wild Flowers, at Washington; and Dr. Bahlsen spoke before the Union of German Students in America, the Clef Club of New York, the New York Association of High School Teachers of German, and the Romance and Germanic Clubs of Columbia University.

Teachers College will be represented on the faculties of the summer sessions of a number of universities. Professor Smith, head of the Department of Mathematics, will lecture at the Harvard Summer School; Professor Monroe, of the Department of the History and Philosophy of Education, will lecture at the summer school of the University of California; while Professor Richards, of the Department of Manual Training, Professor Thorndike, of the Department of Educational Psychology, Professor Dodge and Miss Kirchwey, of the Department of Geography, and Professor Farnsworth and Miss Hofer, of the Department of Music, will all give instruction at the Summer School of the South, at the University of Tennessee.

SUMMER SESSION

Plans for the summer session of the University for 1903 have been made in accordance with the demands of the students and after a careful study of the work of the sessions of the three preceding years. Courses will be offered for the first time in anthropology, economics, geology, music and physiology. It is worthy of note that these courses increase in marked degree the opportunities for scientific work. In subjects given in previous years, courses have not only been changed but, with few exceptions, largely increased. An en-

deavor has been made to coördinate the work of the summer session as closely as possible to the regular work of the academic year; the purpose being to dignify the study of the summer student by giving it academic importance and to secure an attendance for a series of years.

The instructors in the summer session of Columbia University have always been experienced teachers who give similar courses in the regular academic work. Thus far they have been drawn almost wholly from Columbia. A special feature of this year's session will be the addition to the teaching force of instructors from other universities. Professor Joseph Jastrow, of the University of Wisconsin, will give courses in psychology; Professor Wilbur Lucius Cross, of Yale University, in English; Miss Mary Anderson, of the University of Chicago, in nature study; and Dr. Henry S. Curtis, of the DeWitt Clinton High School, will lecture on vacation schools and children's playgrounds, and on university extension work. The additions from the staff of Columbia University are: Professors Livingston Farrand, Frederick J. E. Woodbridge, Amadeus W. Grabau, and Charles H. Farnsworth, Dr. Burton-Opitz and Mr. Alvin S. Johnson. A special course of thirty lectures on "The educational problem in the Philippine Islands" will be given by Mr. Fred. W. Atkinson, General Superintendent of Education in the Philippines.

The public lecture course will be of unusual interest, and will include lectures on "The psychology of the deaf and blind, with special reference to Helen Keller," by Professor Jastrow; "Liberal education," by Professor Woodbridge; "The origin of the Great Lakes, and the life history of Niagara Falls," by Professor Grabau; "Some old opinions of the novel," by Professor Cross; "Persia old and new," by Professor Jackson; "Mediæval history," by Dr. Shotwell; "The architecture, sculpture, and historic sites of New York and vicinity, including West Point and the Washington Irving region at Sleepy Hollow," by Mr. Kellogg; and "Gold and silver assays," by Professor Miller.

Details regarding the new summer courses in medicine will be found above, p. 22.

SUMMARIES OF UNIVERSITY LEGISLATION

THE TRUSTEES

December Meeting.—The President announced the death of Professor Rood, and the following minute was adopted:

The death of Ogden Nicholas Rood, for thirty-eight years Professor of Physics in this University, which occurred on November 12, closes the academic career of a great scholar who became one of the most advanced and best known of investigators in the domain of physical science. Professor Rood's entire life and interest were bound up in the University and in his laboratory, and his single-minded devotion to his scientific work is worthy of all praise.

The thanks of the Trustees were voted to Mr. F. Augustus Schermerhorn for his gift of \$315, to be used for the purchase of microscopes, crystal models, and other needed apparatus for the Department of Mineralogy.

The President reported that he had designated the Bursar as Chief of the Bureau of Supplies; and the sum of \$350 was appropriated for the wages of an additional office boy in the office of the Bursar.

Edward L. Thorndike, Adjunct Professor of Genetic Psychology in Teachers College, was assigned a seat in the Faculty of Philosophy. The appointment of A. S. Chittenden, M.D., to be Assistant in Pathology from November 1, 1902, for the remainder of the academic year, *vice* Cyrus West Field, M.D., resigned, was confirmed. The resignation of Professor James H. Hyslop was accepted, to take effect June 30, 1903, with leave of absence for the remainder of the academic year.

January Meeting.—The Clerk announced the death of Mr. William C. Schermerhorn, Chairman of the Board, and the following minute was thereupon adopted:

In recording the death of Mr. William C. Schermerhorn, the Chairman of the Board, the Trustees desire to make formal acknowledgment of his services to the University and to give expression to their personal feeling of respect and affection.

Graduated from Columbia College sixty-three years ago, he has been one of its Trustees for forty-two years, and for the past ten years has been Chairman of the Board. In the remarkable development of the institution during that long period of time he has taken a deep interest and an active part. Acquainted as few other men have been, not only with its history, but with the details of its financial and educational administration, he has been in the heartiest sympathy with every wise plan for its enlargement and its increased efficiency. His alertness of mind, his sound judgment, his cultivated taste, his progressive spirit and his loyal and untiring devotion to the interests of the University have been of the greatest possible service in the critical years through which it has safely passed, while his presence at the head of this Board has done much to inspire public confidence in the wisdom of its management of the great trust committed to it. Always ready by well-timed and judicious gifts to meet the need of increased resources, he has been one of the most constant and generous benefactors of the University, the building which bears his name representing only in part his numerous contributions.

Meanwhile his never-failing tact, geniality and courtesy have greatly endeared him to all his associates.

By the death of Mr. Schermerhorn the University has been de-

prived of one of her most loyal and devoted sons, whose liberality on behalf of his Alma Mater was unstinted, and whose interest in her welfare and advancement was un-failing.

The Trustees direct this minute to be entered upon their records as an expression of their appreciation of the character and services of their associate, and of their sympathy with the members of his family.

Mr. Pine was reelected Clerk of the Board; and Mr. Cammann was elected to succeed Mr. Parsons on the Committee on Finance; Mr. F. A. Schermerhorn and Mr. Cutting to succeed Mr. Smith and Mr. W. C. Schermerhorn on the Committee on Buildings and Grounds; the Rev. Dr. Dix to succeed the Rev. Dr. Vincent on the Committee on Honors; and Mr. Parsons to succeed Mr. Pine on the Committee on Education.

A contract between the Alliance Française and the University providing for the establishment of courses of lectures on the French language, literature and history, and for the examination and certification of teachers of French, was approved and ordered to be executed.

In response to an invitation from the Trustees and Faculty of Indiana University, which was accepted, the President was authorized to designate a representative to attend the installation of William Lowe Bryan, Ph.D., as President of the Indiana University, on January 20 and 21.

The annual reports of the committees on Buildings and Grounds, on the Library, and on Education, were presented.

An additional appropriation of \$3,140 was made for supplies for the year 1902-03; and the appropriation in the budget for the current

year of \$1,000, for the salary of organist in the chapel, was made available also for the purchase of an organ.

As a memorial to the late Stephen Whitney Phoenix, the research laboratories in the Department of Physics were named the "Phoenix Physical Laboratories."

The President was authorized to make arrangements for summer courses of instruction in medicine during the summer of 1903 and thereafter, upon condition that such instruction be arranged for without cost to the University.

Joseph John Thomson, D.Sc., F.R.S., was appointed Professor of Physics and Director of the Phoenix Physical Laboratories; and Charles Lane Poor, Ph.D., was appointed Lecturer in Astronomy for the academic year 1902-03. The appointment of Dr. Linnæus E. La Fetra to be Instructor in the Department of the Diseases of Children and Chief of Clinic for the remainder of the academic year, *vice* Dr. Francis Huber, resigned, was confirmed. The title of Professor James E. Russell was changed from Professor of the History of Education to Professor of Education. The resignation of William A. Keener as Kent Professor of Law was accepted to take effect at the close of the current academic year, June 30, 1903.

February Meeting.—The President announced the death of Mr. Abram S. Hewitt.

Mr. Rives was elected Chairman of the Board.

The President announced a gift from Mr. Joseph F. Loubat of \$100,000 for the endowment of a professorship of American archæology.

The endowment was accepted with a vote of thanks; and the chair was designated the "Loubat Professorship of American Archæology." The thanks of the Trustees were also voted to the executors of the estate of Julius Beer, for a gift of \$10,000 for the establishment of the "Julius Beer Lecture Fund," to provide for lectures to be given under the direction of the Faculty of Political Science and to be open to the public; also to the trustees of Temple Emanu-El, for a gift of \$10,000 in commemoration of the seventy-fifth birthday of the Rev. Dr. G. Gottheil, for the endowment of the "Gustav Gottheil Lectureship in Semitic Languages"; also to Mr. Wm. G. Low, for a gift of \$250 for the purchase of books upon maritime and international law; also to Messrs. Hendricks Brothers, for a gift of \$100 towards the equipment of metallurgical laboratories; also to Mr. Francis W. Ford, for a gift of a map of the College site at Park Place.

The Committee on the Library submitted a design for the Illig Medal, which was approved.

The Committee on Finance submitted its annual report with recommendations for appropriations for the ensuing fiscal year.

The President submitted the annual reports of the Vanderbilt Clinic and of the Sloane Maternity Hospital.

The President reported that Professor Joseph J. Thomson, of the University of Cambridge, had declined the appointment of the Trustees as Professor of Physics and Director of the Phoenix Physical Laboratories.

The President reported leaves of

absence to Professors John K. Rees, Edmund B. Wilson and A. V. W. Jackson for the remainder of the college year.

The following appointments were confirmed: Tracy Elliot Hazen, Ph.D., as Tutor in Botany in Barnard College, *vice* Louise B. Dunn, deceased; Homer Doliver House, B.S., as Assistant in Botany, *vice* Tracy Elliot Hazen, promoted; and Maurice Joseph Thompson, A.B., as Assistant in Mathematics, *vice* David H. Pollard, resigned.

Marshall H. Saville, Curator of Archæology in the American Museum of National History, was appointed Loubat Professor of American Archæology.

THE UNIVERSITY COUNCIL

November Meeting.—The members of the University Council representing the Faculties of Philosophy, Political Science and Pure Science, were constituted a Standing Committee on Higher Degrees, to consider and act upon the following matters: (1) petitions for acceptance as candidates for the degrees of Master of Arts and Doctor of Philosophy, or either of them, under irregular conditions; (2) petitions to be permitted to present to the Library fewer than 150 copies of the Doctor's dissertation; (3) petitions for extension of time in which to complete the requirements for the degree of Doctor of Philosophy; and (4) recommendations for the degrees of Master of Arts and Doctor of Philosophy made by the several faculties. It was voted that the Secretary of the Council should act as Secretary of this Committee, and that the Committee be required

to report its action to the University Council for record.

The special committee on changes in the academic calendar presented the following report:

The Committee have given careful consideration to the questions involved in the making of an academic calendar, from the view-point of the University as a whole, and with regard to the best and highest interests of both teachers and students. They are of opinion that the time now devoted to instruction during the calendar year may be somewhat increased, and they have agreed upon a plan by which such an increase may be brought about. It is felt by the Committee that one objection to the present calendar is that it makes different academic years of differing lengths, and that, under existing rules, there is often an undesirable, but unavoidable, difference in length between the two parts into which each academic year is divided. The Committee propose a plan by which each academic year will be of one and the same length, and by which each academic year will be divided into two parts, giving as nearly as possible the same number of days in each for instruction.

It would be highly desirable if some or all of the separate and isolated holidays as they now exist could be stricken from the calendar; and, with a view to making this possible, the Committee recommend that the Council ask the Trustees for an amendment of the Statutes that will place the control of the holidays to be granted in any given academic year more largely in the hands of the Council than is now the case.

In some parts of the University, at least, it is held to be highly desirable—indeed, almost necessary—to provide for a short recess at Easter, to include the days from the Thursday before Good Friday to the Monday after Easter, both inclusive. The proposed amendment to the Statutes which the Committee report is so drawn as to make it

possible, if it should be adopted, for the Council to authorize such an Easter recess for the University as a whole or for any part thereof.

A form of calendar for the academic year 1903-04 was reported, with the following explanations:

It is proposed to base the calendar upon Commencement Day, and to fix Commencement Day at the Wednesday nearest June 11, in each year. It is proposed, further, that the academic year shall open 37 weeks before Commencement Day. In 1903-04, therefore, the opening of the academic year would occur on Wednesday, September 23.

Although the Council has no control over the intermediate examinations, it is believed by the Committee that those faculties under whose control intermediate examinations are held may well be asked by the President to consider whether it is not possible, in the interest of a longer period of instruction, to complete the work of such examinations in a shorter time than two weeks. In the hope that such may be the case, and subject to the action of the faculties concerned, the Committee have inserted in the calendar here recommended a provision by which ten days are allotted to intermediate examinations in such schools as require them.

The proposed calendar was adopted; and it was voted to recommend to the Trustees that chapter 18, section 2, of the Statutes be amended so as to read as follows:

In the discretion of the University Council there may be intermissions of the academic exercises of the University as follows: At Christmas time for a period not exceeding two weeks, at Easter for a period not exceeding four days, and on public holidays established by law, and such days in each year as may be recommended by the civil authority to be observed as days of fast or thanksgiving.

It was voted to recommend to the several faculties that the hour from half past twelve to half past one o'clock, from Monday to Friday, inclusive, be an open hour to be kept free from academic exercises.

Chinese was added to the subjects allowed for the degrees of Master of Arts and Doctor of Philosophy with the value of a major and one minor subject; and Chinese and Coptic were added to the list of minor subjects for the same degrees.

Harry Thiselton Mark, Master of Method in Owens College, Manchester, England, was appointed to a Fellowship in Education.

Professor W. H. Carpenter was elected Secretary of the Council, for the academic year 1902-03.

Professor J. C. Egbert, Jr., was appointed to take charge of Commencement exercises in 1903.

Committees were appointed to consider and report at the next meeting of the Council what celebration, if any, should be held on the 150th anniversary of the foundation of the original college, in 1904; to report to the Council a list of those institutions whose baccalaureate degree shall be accepted as the basis for graduate work; and to draft regulations for the award of the international fellowships for study in France.

FACULTY OF POLITICAL SCIENCE

October Meeting.—"The interests of the United States in the West Indies" was designated as the subject for the Bennett Prize Essays for 1903.

December Meeting.—It was voted that, in applying the rules regarding

choice of subjects for the higher degrees, courses 6 and 7 in Public Law (History of European and American Diplomacy) may be counted either as Public Law courses or as History courses.

TEACHERS COLLEGE FACULTY

December Meeting.—The existing requirements for the attainment of the Bachelor's Diploma for teaching in elementary schools, were increased by the regulation that candidates shall take a course in the Theory and Practice of Teaching Nature Study, English, Geography, History, or Mathematics in Elementary Schools, and shall also elect one or more of these courses, omitting the practice teaching.

A new professional course was established to train teachers of physical education in elementary and secondary schools. For admission to this course the student must have completed a satisfactory course in an approved secondary school, and a course of collegiate or technical training during a period of at least two years following. The course requires of all candidates the Elements of Psychology, Child Study, Physiology and Hygiene, Special Gymnastics, Applied Anatomy and Physiology, and Bacteriology in the Junior year; and the History and Principles of Education, Theory and Practice of Teaching Physical Education, School Hygiene, the History of Physical Education, and Anthropometry in the Senior year. From three to six points elective are also included in each year.

STUDENT LIFE

The half-year just ended has been characterized by steady and consistent activity in nearly every branch of undergraduate life. The clubs and debating societies are all doing well, and the social and literary interests have not been neglected.

One of the most prominent events of the second half-year will be the annual **Varsity Show**, which is to be presented at Carnegie Lyceum during the entire week of March 16. The play selected is "Her Majesty's Mischief Makers," a comic opera in two acts. The book is by Edgar Allen Wolff, 1901; the lyrics by Arthur G. Hays, 1905L., and the music by Clarence J. Penney, 1901. The piece is fully up to the standard of former Varsity shows, the music being especially catchy. Rehearsals are now going on under the direction of Mr. R. O. Jenkins, with the following cast:

Florizella.....M. C. Hasell, '06
(the Queen)
Petrella.....G. F. Bambach, '03
Titella.....C. Merritt, '04 S.
Mirella....R. K. Wuppermann, '04
Vitella....H. J. Bartholomae, '03 L.
Kiley.....L. G. Spence, '05
Sambo.....A. R. Camp, '04 S.
Van Rensselaer.H. C. Adams, '04 L.
Patsy.....H. W. Stanley, '03
Ima Lone.....G. Wood, '05
Casimir.....W. J. Mitchell, '05
Specialty Acts.—J. G. Ray, '05 L.,
M. Hardman, '05 L., and H. S.
Osborne, '03 S.

The management of the show is in the hands of Roi Cooper Megrue, 1903, and several innovations will be introduced. It is planned to have special nights for alumni, under-

classmen, and members of King's Crown. This society is responsible for the show this year, and it is hoped that this fact will make the presentation more of a success, both financially and socially, than heretofore. The music for the production will be furnished by the Philharmonic Orchestra, under the leadership of Mr. Hinrichs.

The semi-monthly meetings of **King's Crown** have been full of interest and good fellowship and as a rule well attended. On Thursday evening, January 8, Mr. Joseph Bishop, editor of the *Commercial Advertiser*, spoke on "Modern Journalism" and gave some interesting personal reminiscences. At recent meetings the policy of having general discussion of prominent undergraduate problems has been inaugurated. A plan has been suggested of devising some award from the society for student work along lines other than athletic. It has often been thought that debating and chess teams, etc., should be rewarded by some insignia, provided that confusion with athletic insignia be avoided. A committee has been appointed by the Crown to investigate the plan, and some definite action may be expected soon.

The meetings of the **Deutscher Verein** continue to be imbued with good Columbia spirit and *Gemütlichkeit*. The society meets on alternate Mondays in its rooms in West Hall, where the evening is spent in listening to a short address by some prominent speaker, followed by songs and toasts.

The **Société Française** is holding its meetings regularly, with good attendance. The custom of producing a French play in conjunction with the Barnard Society having been abandoned, some standard play will be presented by the members of the Columbia Society alone. No definite arrangements, however, have yet been made.

The **Debating Union** has not been idle, and although Columbia will have but one inter-collegiate debate this year, the Union has arranged a program of society debates which will scarcely allow debating interest to lag. On January 14 the Barnard Literary Society met and defeated the Philotechnian Society of Williams College, and on February 23 the Philolexian Society will meet Hamilton College in Clinton. On the following Saturday Philolexian will debate the Literary Society of the Twenty-third Street Branch Y. M. C. A. in Association Hall. The inter-class debate will be held in March and the annual Philolexian-Barnard contest early in April.—The inter-collegiate debate with Cornell will be held in Carnegie Lyceum on April 3. The question will be: "Resolved, that a system of electing United States Senators by popular vote would be preferable to the present method of election." About forty men have responded to the call for candidates and are at work under the supervision of Mr. Ringwalt. The prospects for a winning team are excellent.—The Union has entered into a two years' agreement with the University of Michigan for a debate in Ann Arbor in December, 1903, and a return contest in New York in March, 1905,

and is about to take up the matter of a tri-party agreement with Cornell and Pennsylvania.—The preliminary trials for the George William Curtis Medals will be held in Earl Hall on February 28. The trials will not be open to the public. Up to the present time it has been impossible to get a definite idea of the number of men intending to compete, but it is likely to be large. March 25 has been set as the date of the final public contest.

The **Publications** continue to complain about the scarcity of literary men among the undergraduates, but in general, a good quality has been maintained. *Spectator* continues to furnish the news of the university while it still is news. Editorially the paper continues to be conservative although when occasion demands it expresses fearless criticism. C. LeRoy Hendrickson, 1903, has resigned as editor-in-chief, and Roscoe Crosby Gaige now directs the policy of the paper.—The *Literary Monthly* has had a most successful year thus far. The stories and verse are of a creditable quality and the book reviews remain an interesting feature. Some censure has been heard to the effect that *Lit.* has not adhered strictly to tradition in its editorial attitude, but the policy of abandoning the old oracular and somewhat haughty character of criticism in favor of spirited discussion of student matters seems to have been eminently successful. A series of articles by prominent alumni promises to be an interesting feature.—*Jester* has been quite successful at being funny. The last issue was a double Valentine number. The drawings con-

tinue to be one of the best features. —*Morningside* has improved since the first of the year, but it has hardly succeeded in living up to its traditions. Most of the articles continue to be written by members of the board.

The 1904 *Columbian*, after innumerable delays, has made its appearance. Several changes have been introduced. The book is square in shape, bound in flexible calf, with divinity circular edges, and is printed on antique paper. There are a number of excellent drawings and half-tones. An *edition-de-luxe* has been prepared, limited to thirty numbered copies, and sold at \$5.00. The regular edition remains at the old price, \$1.50. The book is dedicated to President Butler.

The usual activities have been carried on among the **Classes**. The Seniors have chosen class day officers, as follows: Valedictorian, Gerald Stuart O'Loughlin; historian, Richard Compton Harrison; presentation orator, Roi Cooper Megrue; yew tree orator, R. B. Bartholomew; poet, A. Davis; prophet, Roscoe Crosby Gaige. Marcellus Hartley Dodge is senior president. The annual **Junior Ball** was held at Sherry's on January 16, and proved a typical Columbia affair. The patronesses numbered 150.

The **Chess Team** succeeded in winning the inter-collegiate championship in the tournament held in New York on the last three days in December, defeating Harvard, Yale and Princeton. Columbia was represented by F. H. Sewall, H. A. Keeler, G. W. Tucker, and C. B. Barshell. The final score was as follows:

	Won	Lost
<i>Columbia</i>	7½	4½
<i>Yale</i>	7	5
<i>Harvard</i>	6	6
<i>Princeton</i>	3½	8½

The fifth annual cable chess match with Oxford and Cambridge for the Isaac L. Rice trophy will take place in April. Columbia has two men, Sewall and Keeler, on the team, with Tucker as an alternate.

A **Whist Team** has been organized this year, and a dual match is to be played with Yale on February 14. A team will also enter the contest for the inter-collegiate trophy, held in New York in March.

D. C. B.

The **Columbia University Graduate Club** is composed of men holding a baccalaureate degree who are seeking the degree of Master of Arts or Doctor of Philosophy. It aims to promote social intercourse, academic interest, university spirit, and discussion of problems in graduate study at home and abroad. The advantages of the club are apparent and merit the support of Columbia graduate students and professors. At the opening of the academic year the club was favored with a most helpful address by President Butler on "The aim, method and scope of graduate study in America." Refreshments and social intercourse followed the address. Doctor Lyman Abbott at the December meeting addressed a large and appreciative audience at Earl Hall on "The labor problem." After the address, in conjunction with the Women's Graduate Club of the University, a reception with refreshments was tendered the distinguished speaker and a delightful social evening ensued. At Earl

Hall during the holidays the club entertained the annual convocation of the University Graduate Clubs of America. The convention was well attended by representatives from Harvard, Yale, Princeton and other leading institutions of the country. Valuable papers and helpful discussions were presented on Seminar methods at various institutions, migration of university students, intercommunication of thesis subjects through the publication of a Graduate Hand Book, and benefits accruing from the more intimate association of graduate students and the closer federation of graduate clubs and university authorities. The policy of the club is to federate the various graduate student organizations of the University into one representative body, worthy of the historic traditions and commanding position of Columbia in the university world. To this end the program of meetings will continue to show the names of leading representatives of contemporaneous thought in the world of science, literature, art, education, sociology and reform. Members of the faculties of Columbia and other leading institutions will be invited to participate in the meetings, and no effort spared to render the Graduate Club in every sense a true exponent of Columbia University spirit. The following officers of the club were elected at the opening of the year: Frederick A. Cum-

mings, President; W. K. Boyd, Vice-President; John Lee Brooks, Secretary, and C. C. Henson, Treasurer.

The following resolutions were recently adopted by the **Women's Graduate Club** in recognition of the services rendered by Mrs. Bryson.

Whereas, during the year in which Mrs. Bryson acted as Secretary of the Women's Graduate Club, each student recognized her cordial interest in friends and strangers alike and her hearty efforts to assist all who came to her; and

Whereas, the club owes much of its vitality and prosperity both to her active participation in all the details of club life, and more especially, to the helpful mutual understanding which through her has been established between the University and the club, by means of which the club instead of occupying its former cramped quarters now enjoys the hospitality of Earl Hall; and

Whereas, despite this general appreciation there has been as yet no expression of it by the club as a body; therefore,

Be it resolved, that the club now express to Mrs. Bryson its sincere gratitude for and appreciation of her efforts and their results, realizing that her earnest and sympathetic work has done much to make the woman graduate students feel themselves a vital part of the University and to bring them into the bonds of a genial and helpful camaraderie; and

Be it further resolved, that a copy of these resolutions be sent to Mrs. Bryson and to the President of the University.

ATHLETICS

Basketball, hockey, and track athletics are just now especially prominent, while crew and baseball team are beginning hard and regular practice. The **Basketball Team** started strongly in the intercollegiate schedule, but was defeated by Yale on January 23 and February 10. The team has been playing well throughout the season, and may be expected to made a strong bid for the intercollegiate championship. The scores of games played thus far are as follows:

January 13,	Columbia. . .	31	Princeton . .	16
" 18,	" . . .	29	Cornell. . .	13
" 23,	" . . .	12	Yale. . . .	14
February 7,	" . . .	14	Harvard . .	12
" 10,	" . . .	16	Yale. . . .	22
" 13,	" . . .	19	Harvard . .	11

The **Track Team** has arranged for an extensive indoor season. A series of indoor games has been started, to be held Wednesday of each week in the gymnasium throughout the rest of the college year. Trainer Hjertberg is working with a large number of good candidates. During the winter the relay team will meet teams from most of the other universities in the various armory games. On February 28, the Columbia Track Athletic Association will hold its third annual indoor games in the 22d Regiment Armory. Some event is scheduled for nearly every week until the intercollegiate meet on May 29.

The work of the **Hockey Team** has not been entirely satisfactory, at least in so far as the intercollegiate series is concerned, in which the team has suffered three defeats and played one tie game.

Practice has been made easier by the construction of an outdoor rink on South Field, but the weather has not often been favorable for its use. A second team, composed of men who have not played on the first seven, has been formed.

The **Gym Team** was defeated in the dual competition with Yale held in the gymnasium on February 6, by a score of 31 to 24. The work of the team was very creditable, but the loss of W. L. Benham, 1903, who was expected to win first place on the parallel bars, caused a severe handicap.

In **Water Polo and Swimming** Columbia has been very successful. The intercollegiate water polo games are being played in the tank of the N. Y. A. C. this year, and Columbia's team will play the championship game with Harvard on March 14. The team is fortunate in securing Joe Ruddy, of the N. Y. A. C., as coach. In individual swimming events, the men have been successful in most of the races they have entered. On January 31, Yale was defeated in a relay race. The time, 3 minutes, 19 2-5 seconds, was the fastest ever made in a 300-yard race with four men, each swimming 75 yards. A series of semi-monthly handicap contests is being held in the gymnasium tank.

The **Lacrosse Team** has been practising regularly on West Field. The schedule of games has been arranged, the opening contest being on April 4. Mr. Allan, goal keeper of the Toronto Lacrosse team, will act as coach.

The **Fencers** have not been idle, and on February 14 the team begins its regular schedule with a dual meet with Harvard. Mr. Murray is acting as coach.

The work of the 1903 **Crews** was given an enthusiastic start at a large mass-meeting held in Earl Hall on January 14. Dean Van Amringe presided and a number of the old crew men, including Pierrepont, Irvine, Nash, Jackson, Putnam and J. A. B. Cowles, spoke. The exact situation of Columbia's rowing interests was explained and the needs and prospects for the coming season were set forth. The meeting was very hopeful and encouraging for a successful season. Coach Hanlon seems pleased with the work of the candidates for both Varsity and Freshmen crews. The machines have been placed in new

quarters beneath Schermerhorn Hall, where the ventilation is better than in the old room. With the new boathouse on the Harlem every facility will be at hand when the crews are ready to go on the river.

Baseball promises to become more prominent than usual this year. Manager Hendrickson has announced an excellent schedule, with several extended trips. An innovation is the establishment of a schedule for a second team. Practice has already begun in the cage in the gymnasium with a large number of good men from last year. No definite announcement of a coach has yet been made. Twenty-nine games are to be played, beginning on April 1. Six of these will be home games, and eleven will be played in New York.

D. C. B.

THE ALUMNI: NECROLOGY

BARTOW, Rev. Evelyn Pierrepont, A.B., 1869, A.M., 1872, died in Utica, N. Y., on October 17, 1902, after a year's illness. Mr. Bartow was born in Brooklyn, June 13, 1846, received his preparatory training at Dr. Huntington's Grammar School, graduated from Columbia College in 1869 with the degree of Bachelor of Arts, and three years later he received the degree of Master of Arts from the same university. After graduating from the General Theological Seminary in New York City, he was ordained deacon by Bishop Potter, June 30, 1872, and was made priest in 1873. On August 8, 1872, he was made assistant of Mount Calvary Church, Baltimore, and was elected assistant priest, July 24, 1873. Later Mr. Bartow became Rector of the Church of the Holy

Comforter in Rahway, N. J., and he also became Assistant Rector of St. Stephen's Church in Providence, R. I. For the last seven years Mr. Bartow had been residing in Utica, N. Y. In 1881 he married Mary Hurst, who died two years later. A brother and a sister survive him.

BECK, William Preston, A.B., 1868, died during the year.

BRADY, Dr. Frederick L., M.D., 1899, died from typhoid fever in St. Luke's Hospital, New York City, December 24, 1902. Dr. Brady was a member of the Rough Riders during the Spanish-American War, and took part in the engagements at Las Guasimas, San Juan Hill, and Santiago. Dr. Brady was thirty years old.

BRADY, James M., A.B., 1868, died

in New York City on July 2, 1902, aged 55.

CADY, Rev. Hamilton, A.B., 1885, died at New Canaan, Conn., June 26, 1902.

CASTNER, Hamilton Young, School of Mines, 1875-1878, died at Saranac Lake, N. Y., on October 11, 1899. Cf. QUARTERLY, Vol. V, No. 2, p. 212.

DORAN, Charles Edmund, a member of the fourth year class of the College of Physicians and Surgeons, died January 7, 1903, at Roosevelt Hospital. Mr. Doran was a resident of Sidney, Nebraska.

DUNN, Louise Brisbin, A.B., 1897, A.M., 1899, died suddenly of heart disease on December 18, 1902. Miss Dunn graduated from Barnard College in 1897, received her degree of Master of Arts from Columbia University in 1899, and for the last two years had been a tutor in the Department of Botany in Barnard College.

EARL, Robert, LL.D., 1887, died December 2, 1902, in Utica, N. Y., after a ten days' illness caused by paralysis. Robert Earl was born in Herkimer, N. Y., September 10, 1824. He was prepared for college in the Herkimer Academy and graduated from Union College, Schenectady, in 1845, later receiving the honorary degree of LL.D. from Columbia University in 1887. For two years after graduation Robert Earl was principal of the Herkimer Academy, and then choosing law as his profession, he was admitted to the bar in 1848. He then successively held the positions of Editor of the Herkimer Democrat, Supervisor, County Judge, and Surrogate of Herkimer County. In 1869 Judge Earl was elected a Judge of the

Court of Appeals, and he held this position until 1895. Judge Earl was the founder of the Herkimer Library and of the Herkimer Historical Society.

EMMET, Richard Stockton, A.B., 1839, died in New Rochelle, N.Y., on November 23, 1902. Mr. Emmet, who was of distinguished Irish descent, graduated from Columbia College in 1839, and upon being admitted to the bar became one of the foremost members of his profession. Mr. Emmet married Miss Catherine Temple of Albany, who died seven years ago.

FANNING, William, Jr., A.B., 1870, LL.B., 1871, died during the year.

FISH, Nicholas, A.B., 1867, died in New York City on September 16, 1902. Mr. Fish, who graduated from Columbia College in 1867 and from the Harvard Law School, held the following positions in the United States Diplomatic Service: 1871-1874 Second Secretary of Legation at Berlin, 1874-1877 Secretary of Legation at Berlin, 1877-1881 *Chargé d'affaires* to the Swiss Confederation, 1882-1886 Minister to Belgium. In 1866 Mr. Fish came to New York and entered the banking business. Mrs. Fish, née Clemence S. Bryce, survives him.

GARTH, Charles M., A.B., 1870, died in Louisville, Ky., on February 26, 1902.

GRASSE, Henry, LL.B., 1875, died in New York City on December 1, 1902, after a five weeks' illness, at the age of forty-eight. Mr. Grasse, who was prominently identified with Republican politics, was associated with Recorder Goff as counsel for the Lexow investigation in 1894, and was a candidate for the position of Judge of the City Court in 1891.

GUERNSEY, Joseph Reynolds, A.B., 1886, LL.B., 1889, died in New York City in December, 1902. Mr. Guernsey, who was a prominent lawyer, was a member of the Alpha Delta Phi Club and of the Bar Association of New York City.

HALL, Edward Fernor, A.B., 1872, died of cancer in Roosevelt Hospital on October 7, 1902.

HARVEY, Alexander, LL.B., 1884, died in New York, September 26, 1902.

HERRMANN, William Mark, a member of the Freshman Class of Columbia College, died on February 5, 1903, after a short illness.

HEWITT, Abram S., A.B., 1842, LL.D., 1887, died in New York City on January 18, 1903. Cf. *QUARTERLY*, Vol. V, No. 2, p. 191.

HOLLY, Charles F., Jr., A.B., 1878, died at Olean, Colo., last August.

HUMPHREYS, Willard, A.B., 1888, A.M., 1889, LL.B. and Ph.D., 1890, M.D., New York University, 1890, died at Princeton, N. J., September 26, 1902, at the age of thirty-five. Professor Humphreys was appointed instructor in Latin at Princeton in 1892, Assistant Professor of German in 1894, and Professor of German in 1897, a position which he held until his death. Cf. *QUARTERLY*, Vol. V., No. 1, pp. 45-47.

INGERSOL, William Halsey, died at his home in Northport, N. Y., at the age of fifty-nine. Mr. Ingersol was an assistant in engineering at Columbia University from 1875 to 1878, and assistant in mechanics and astronomy from 1878 to 1881. He retired in 1887 because of ill health.

JACKSON, Oliver Phelps, A.B., 1857, died in Atlanta, Ga., July 19, 1902.

JAMES, Col. Charles F., LL.B.,

1879, died on February 19, 1903, at Highwood, N. J., of pneumonia. Mr. James, who was a member of the law firm of Dittenhoeffer, Gerber, and James, was born in Hamilton, Hudson County, N. Y., on July 12, 1855. He graduated from Hamilton College in 1876 and from the Columbia Law School in 1879. He was successively counsel for the Commissioner of Immigration and Assistant Attorney General. A widow and two children survive him.

KNOX, James Hale Mason, A.B., 1841, A.M., 1844, S.T.D., 1861, LL.D., 1885, died in Baltimore, Md., January 21, 1903. Rev. Knox was born in New York City and was graduated from Columbia College in 1841 with the degree of A.B. In 1844, he received his master's degree, in 1861 he received his doctorate of divinity and in 1885 the doctorate of laws. He was licensed to preach by the Dutch Church of New York in 1845, was ordained by the Presbytery of Newton, N. J., in 1846, and during his life held the position of pastor at German Valley, N. J., from 1846 to 1851, pastor of the Reformed Dutch Church of Easton, Pa., 1851 to 1853, of the First Presbyterian Church of Germantown, Pa., 1853 to 1869, and of the Presbyterian Church of Bristol, Pa., 1873 to 1884. In 1883 he was elected President of Lafayette College and held this position until 1890.

MACY, Charles Alexander, 2d, B.S., 1898, died at Mineville, Essex County, N. Y., on August 18, 1901. His record in college was an exceptionally good one, but the strain of preparation for the final examina-

tion broke down his health and he never fully recovered.

MANDEVILLE, Henry Addison, M.D., 1881, died on January 31, 1903, in South Orange, N. J., where he had resided for the last fifteen years. Dr. Mandeville, who entered New York University at the age of thirteen and graduated from the College of Physicians and Surgeons, was born in Newburg on December 16, 1858. After graduation Dr. Mandeville was for two years on the staff of the Presbyterian Hospital in New York and later became associated with Dr. Thomas H. Burchard. In 1887 he married Mrs. Jennie J. Morgan, the widow of one of the owners of the Morgan Steamship Line.

MEYER, Theodore F. H., LL.B., 1865, died at his home in Yonkers, N. Y., February 7, 1903. Mr. Meyers, who was fifty-eight years of age, continued in active practice as a lawyer until a few years ago, when he suffered from a stroke of apoplexy, which paralyzed his right side. A widow, two sons, and four daughters survive him.

MYERS, George Lawrence, A.B., 1893, died at Aiken, S.C., on February 16, 1903, at the age of 31.

McELLEGOTT, Henry R., A.B., 1865, died on August 5, 1902, in Pittsburgh, Pa.

NEWCOMB, Dr. Obadiah, A.B., 1840, died in November, 1902.

PECKE, Edward M., A.B., 1846, died in 1897.

REED, Thomas Brackett, LL.D., 1900, died recently in Washington, D. C.

ROBINSON, Robert Emmet, A.B., 1863, LL.B., 1865, died suddenly in his law office in New York City on February 3, 1903. A widow, a son, and a married daughter survive him.

ROOD, Ogden Nicholas, died in New York City, November 12, 1902. Cf. QUARTERLY, Vol. V., No. 1, pp. 47-62.

SCHERMERHORN, William C., A.B., 1840, and Chairman of the Board of Trustees of Columbia University. Cf. QUARTERLY, Vol. V, No. 2, p. 189.

SPEYER, Samuel V., LL.B., 1872, died of apoplexy in the New York Hospital recently. He was a graduate of the Columbia Law School, a member of the New York Bar Association and one of the founders of the Society of Ethical Culture.

STOUT, Wright C. (non-graduate), College, 1886, died at Bloomfield, N. J., June 13, 1901.

STURTEVANT, Horace Richmond, A.B., 1902, died of pneumonia in New York City at the age of twenty-five. Mr. Sturtevant, graduated from Columbia College in 1902, and was at the time of his death a member of the Columbia Law School. He was noted at the University for his many feats of physical strength. He was a member of the *Deutscher Verein* and the *Alliance Française*.

TAYLOR, Herbert H., LL.B., 1883, died in Brooklyn recently at the age of forty-two. Mr. Taylor was a graduate of the Union Theological Seminary and the Columbia Law School, and at different times held the positions of Assistant Naval Officer, Clerk in Kings County Court and Under Sheriff of Kings County.

TIMPSON, J. W., A.B., 1856, died recently.

WELLS, Ida Eloise, A.B., 1898, and Secretary of her class, died at Rahway, N. J., on November 27, 1902.

WHITE, John J., A.B., 1849, died in New York City on December 31, 1902.

	California.	Chicago.	Columbia.	Cornell.	Harvard.	Illinois.	Indiana.	Johns Hopkins.	Leland Stanford, Jr.	Michigan.	Minnesota.	Missouri.	Nebraska.	Northwestern.	Pennsylvania.	Princeton.	Syracuse.	Wisconsin.	Yale.
College Arts, Men.....	} 2418	612	486	} 783	2109	305	609	163	} 1382	662	491	318	407	323	} 476	758	491	681	1205
College Arts, Women.....		839	351		414	290	453	....		607	688	216	546	363		....	390	481	....
Scientific Schools * ..		....	688		584	610	....	....		597	496	224	551	....		....	172	573	738
Law	80	59	461	1181	640	104	90	....	2	847	439	108	166	171	431	494	134	219	253
Medicine	131	222	789	385	445	661	....	258	....	417	285	91	152	605	339	....	139	....	145
Agriculture.....	†	....	....	106	33	216	....	....	....	....	460	72	118	....	475	....	....	456	....
Art	150	....	....	....	....	....	....	....	....	....	....	....	66	102	....	....	45	....	29
Dentistry.....	126	....	....	....	112	180	....	....	....	151	145	....	....	615	403	....	....	....	....
Divinity .....	....	198	....	68	37	....	....	....	....	....	....	....	....	152	....	....	....	....	112
Forestry .....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	40
Music .....	....	....	....	....	....	102	....	....	....	....	60	....	302	357	....	....	565	182	47
Pharmacy.....	77	....	....	....	....	166	....	....	....	68	....	....	....	206	....	....	....	31	....
Teachers College.....	†	95	581	....	....	....	....	....	....	....	....	....	....	....	62	....	†	....	....
Veterinary .....	....	....	....	62	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Graduate Schools	198	437	557	188	316	90	61	187	93	79	160	||	108	46	192	125	45	102	346
Courses for Teachers.....	....	....	1196	....	....	....	....	....	....	....	....	....	256	....	206	....	....	....	77
Summer Session.....	830	2350	643	548	945	229	569	....	48	....	320	468	....	....	....	....	39	339	....
Other Courses	45	....	25	177	....	85	....	79	....	73	....	....	....	....	....	....	100	....	19
Deduct Double Reg..	[250]	[497]	[338]	[318]	[154]	[87]	[134]	[1]	[30]	[191]	[30]	[89]	[383]	[65]	[6]	....	[100]	[180]	[195]
Grand Total.....	3805	4315	5439	3402	5481	2951	1648	686	1493	3764	3505	1408	2289	2875	2578	1377	2020	2884	2816
Teaching Staff	308	196	504	421	533	305	65	145	133	255	280	92	173	285	281	101	170	188	318

* Includes schools of engineering, chemistry, architecture, mines, and mechanic arts.

† Included in scientific schools.

‡ Included in College statistics.

§ Included in College statistics. 180 law students are enrolled.

|| Included in College and Scientific School statistics. About 53 graduate students are enrolled.



THOMAS RANDOLPH PRICE

COLUMBIA

UNIVERSITY QUARTERLY

VOL. V — JUNE, 1903 — No. 3

SOUTH FIELD: ITS POSSIBLE USES

THE plans for the development of South Field which have been prepared by students in the School of Architecture,* two of which are published in this issue, illustrate the uses that may be made of the land and the importance of securing it for the University. It was a just appreciation of its value which induced its present owners to secure the property last spring in order to give the University an opportunity to buy it; and as it seems clear that some means should be found, and reasonably certain that means will be found, to consummate the purchase, speculation as to the best use to be made of the land may be indulged in without detriment and possibly to advantage. The subject is one which admits of considerable divergence of opinion, and which involves so many questions and such a far look into the future as to demand the fullest discussion.

The plans thus far proposed for the distribution of buildings follow closely the system of arrangement already adopted for the present site; and it must be assumed that the buildings to be erected on South Field will conform to our present buildings in general character if not in detail, in order to

* See COLUMBIA UNIVERSITY QUARTERLY, V, 2 (March, 1903), 217, 218.

insure to the University a harmonious and consistent effect as a whole. The quadrangular system has the great practical advantage of being the most economical in respect to space and of permitting gradual development along the lines of the streets and avenues, thus preserving for many years, if not indefinitely, an extensive campus within the quadrangle. Should the eight buildings comprising the great quadrangle shown on plan A be used as dormitories they would accommodate about eight hundred students. Should they be devoted to lecture rooms and laboratories, they would provide for at least three or four times that number. In either case an unbroken open space, at least 365 feet by 675 feet in extent, would remain to be used as a campus or field for athletics, or for the erection of other buildings as required.

Passing next to the question of the use to which buildings on South Field may best be applied, it should be noted that the educational buildings already projected for the upper level of the present site, exclusive of the Green, will provide lecture rooms and laboratories for fully five thousand students. The practical convenience of such an arrangement, the ease with which students may pass from each of the educational buildings to the other and to the Library, and the architectural advantage of grouping all the educational buildings together, are circumstances which collectively seem to present an irresistibly strong argument in favor of concentrating the educational work of the University around the present quadrangle, and against the erection of lecture halls or laboratories on South Field, until the possibilities of the present site have been fully utilized. If this argument be accepted as controlling the present policy of the University, it would seem practicable to make use of at least a portion of the space afforded by South Field for dormitories. The Trustees, by resolution of December 5, 1898, declared their intention of erecting dormitories as soon as means therefor should be provided, and for this purpose South Field is exceptionally well adapted. The needs which led the Trustees to appeal for funds for

dormitories five years ago have in the interval become far more urgent, by reason of the great increase in the number of students coming from long distances. At the present time upwards of a thousand students are living in flats and boarding houses within half a mile of the University. The considerations which in 1898 induced the Trustees to vote that dormitories might be erected upon the Green now point far more strongly to the desirability of utilizing for this purpose the more generous expanse of South Field, when happily it shall come into our possession. It cannot be doubted that the advantages which will accrue to the University from the possession of dormitories are growing greater as the University's influence extends over a wider territory. With the ownership of the land assured and with means at our command to erect dormitories, each one of which will be a source of revenue to the University, it will be within our power to develop that social side of the life of the University, which is generally recognized as hardly less important than the intellectual. Each building may well be made a center of social life, a residence for the younger professors and instructors as well as for the students, with club rooms and a dining hall where all may meet on a common footing as university men. Each building should be planned to contain single rooms and suites of rooms, and the scale of rentals should be adapted to the means of all. It should be possible for the residents of each hall to form dining clubs and to direct the service of the building as is done by the house committee of a club. At the outset, one hall perhaps may be set apart for graduates and another for undergraduate students; and as the demand for rooms and the number of halls increases, and as newer and closer relations are formed, it may be found expedient to assign one hall to the College, another to the Law School, another to the Medical School, and so on. It would seem desirable that the residents should be divided into groups in buildings of moderate size, so that the number of men living in each, while large enough to create a distinct social atmosphere, should not

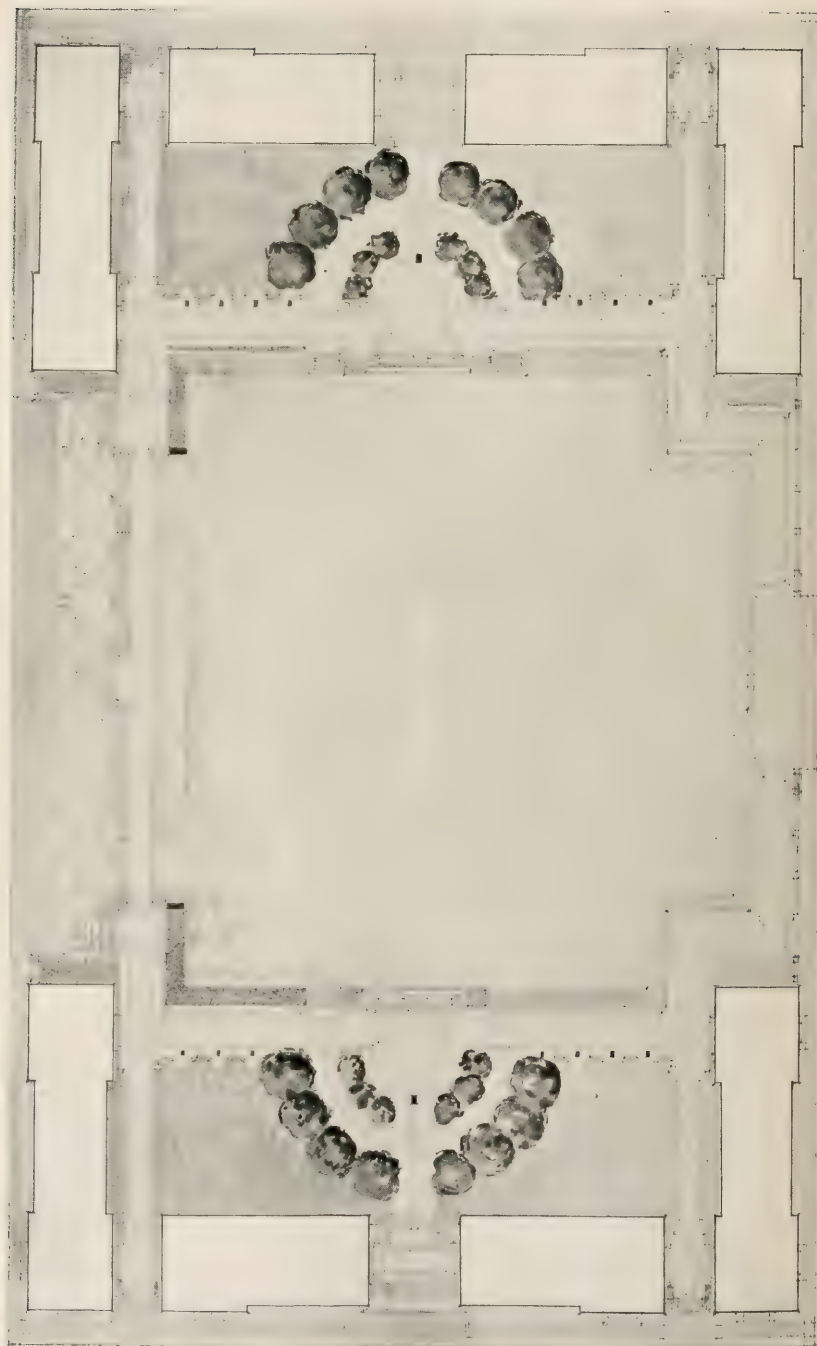
be so large as to sink the individual in the mass. Doubtless, as a general "Commons," Memorial Hall will always be essential; but with a dormitory system so extensive as South Field will permit, the present dining hall will become entirely inadequate, and it is at least an interesting question whether additional accommodation cannot best be supplied by including a dining hall of moderate size in each of the dormitories. If the old-fashioned system of separate entrances and staircases, each giving access to a number of rooms and suites of rooms can be combined with a dining hall for the use of those occupying adjacent entries, it seems likely that such an arrangement would unite the highest degree of privacy with the closest social relations. We must recognize as inevitable, in a large and growing university, the tendency toward a weakening of the ties which hold the students together in a small college; but a counteracting and unifying influence should be created in the associations growing out of the daily living together and the mutual enjoyment of congenial pursuits and surroundings. If we can picture South Field surrounded by eight or more dormitories, each including a body of a hundred or more students living, working, dining and enjoying life together, and each body united by common interests with all the others, we may safely anticipate a strengthening rather than a weakening of common ties and common ideals as the University grows in numbers and in scope.

Just how these results may best be accomplished, it should be our endeavor to discover; it is the purpose of this article merely to suggest possibilities. The experience of others may aid us both negatively and affirmatively, but we cannot expect to find a ready-made model in any other university. In whatever plan we may adopt it should be our aim to develop the democratic spirit and the community of interest which are the strongest moving forces in every body of students, and to create that form of university life which is best adapted to the peculiar conditions and needs of Columbia.

JOHN B. PINE

AMSTERDAM AVENUE

ONE HUNDRED AND SIXTEENTH STREET



ONE HUNDRED AND FOURTEENTH STREET
SOUTH FIELD—PLAN A

BROADWAY

SOUTH FIELD: THE ARTISTIC PROBLEM

DURING the summer of 1902 the President made the suggestion that the architectural treatment of the South Field might furnish a suitable and interesting problem in design for the more advanced students in the School of Architecture. The various schemes of design which would be produced in the course of the study of the problem, even by undergraduates, might well, he thought, prove to be of service to the Trustees should the property be acquired and the problem come up for practical solution.

This suggestion was carried out during the winter, and the resulting designs were exhibited in the school in February. Two of these are reproduced in this issue of the *QUARTERLY*, in connection with Mr. Pine's interesting presentation of the practical and administrative aspects of the problem. Three others were sent to the recent Chicago architectural exhibition, and one of these has been made the basis of a thesis design by a member of the graduating class. The programme for the problem was prepared by Professor Hamlin with the assistance of Mr. Hornbostel, Lecturer on Design in the School of Architecture. It recited the dimensions of the plot, approximately 760 by 460 feet, and required the arrangement upon it of eight buildings in such a manner as to leave ample space for an athletic field large enough at least for a foot-ball "grid-iron." The buildings on the south side of 116th street were required to reproduce the general plan and dimensions of the proposed buildings to be erected on the north side of the street, on the present University property, the block-plans of which were available for comparison. The students were also instructed to recall as far as possible, at least in certain parts of their designs, the general style of the arrangement and architectural treatment of the present University grounds and buildings, so as to give unity to the whole combination on both

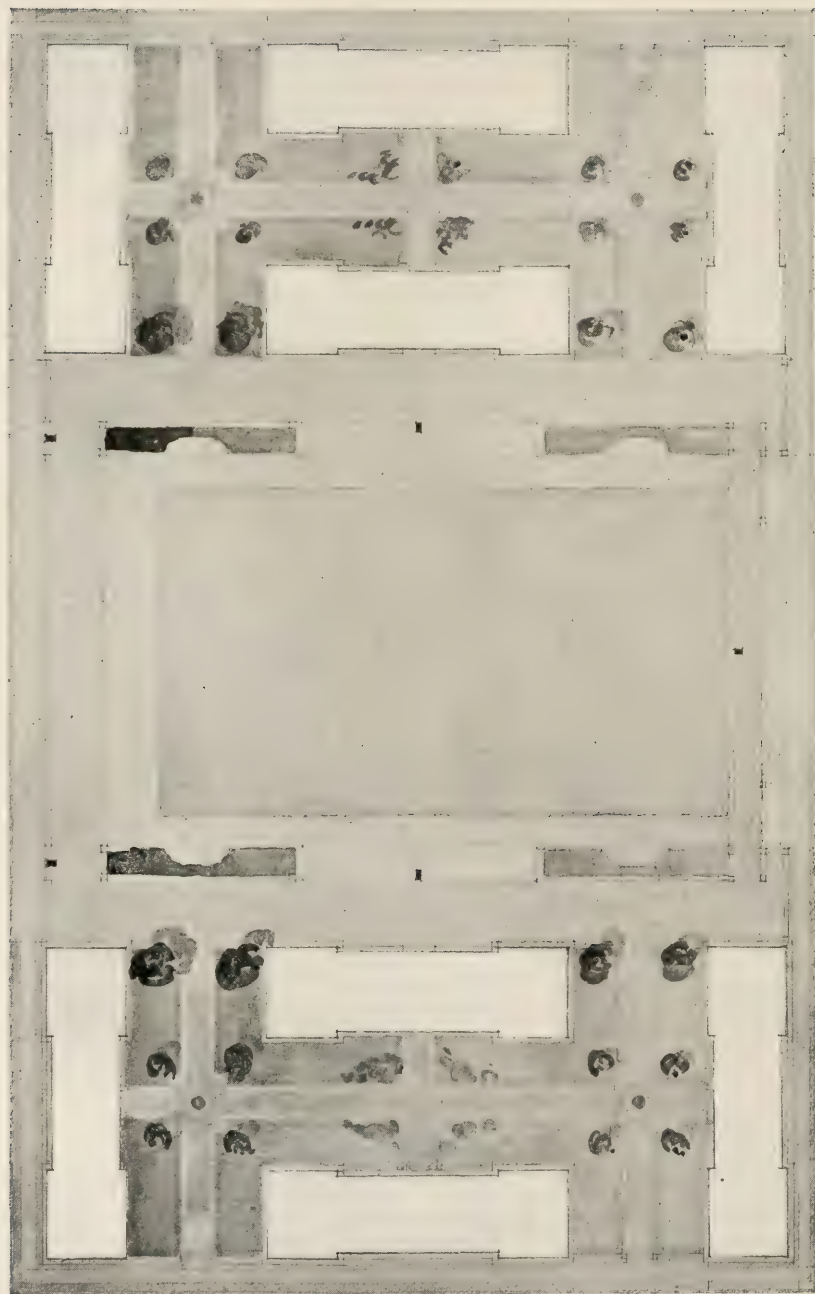
sides of 116th street. And in order that the vista from the Library across the open center of the field southward, might be closed by a dignified and interesting architectural feature instead of by a mass of unrelated houses, apartments and other hap-hazard buildings, it was suggested that a frontage of 100 feet on the south side of 114th street, on the axis of the Library, be supposed to have been acquired for a President's House, which was to form an essential feature of the whole group. This part of the design is not shown in the illustrations, but received more or less careful treatment in all the plans, and proved to be a feature of great artistic value and importance. If this suggestion could be realized, it would add immensely to the artistic completeness of the whole University group.

The design was given out to the students of the Fourth Year class early in February, and three weeks were allowed for its completion. As it was a problem wholly of planning and disposition, no attempt was made to design the elevations of the proposed buildings, and each student prepared therefore a single drawing, showing the South Field and the southern half of the present University property, to the scale of one thirty-second of an inch to the foot. These plans were very creditably rendered in India-ink and color, showing the grading and terracing of the grounds, and the approaches, steps, paths, plantations and gardening proposed, as well as the position and arrangement of the buildings.

In the various designs submitted, three distinct schemes developed themselves for the athletic field which was to occupy the central portion of the lot, and four or five different types of grouping for the buildings. In some the field was nearly square, measuring from three to four hundred feet on a side, and thus covering an area of between three and four acres, ample space for foot-ball contests with a four-lap track around its edge. In these designs the easterly and westerly portions were reserved as courts or gardens for the dormitories, and

AMSTERDAM AVENUE

ONE HUNDRED AND SIXTEENTH STREET



BROADWAY

ONE HUNDRED AND FOURTEENTH STREET
SOUTH FIELD—PLAN B

supposed to be treated with grass, shade-trees and like embellishments. In a second group of designs the athletic field formed an oblong space lying east and west, terminated in most cases by semi-circles. This was less advantageous, as it provided a somewhat narrow field, while it left too little free space at the ends, next the dormitories, for grass and trees. In the third group the field was slightly oblong, on a north and south axis, leaving a very broad area next the dormitories on the east and west, and where the width of the field was adequate this secured very attractive results.

For the purposes of the competition the two buildings on 116th street were supposed to be departmental buildings, devoted (for instance) to Music and Fine Arts: the other six were dormitories, and somewhat smaller in size. All the eight might equally well have been considered to be dormitories. In two of the designs the four buildings in each half of the plot were arranged to form an enclosed quadrangle—an excellent device for quiet for the dormitories. In one, the buildings were united in pairs at the corners of the Field, forming four L-shaped structures. In others, two of the dormitories were set back from each of the avenues, leaving shallow courts or areas for grass between themselves and the avenue. Other combinations appeared in other designs, but these were the most important types. Mr. Palliser's and Mr. Frohne's designs, reproduced in this issue, show two of the most characteristic solutions. The minor details of steps, balustrades, esplanades and courts were carefully studied in most of the designs, the slight pitch of the ground southwards giving opportunity for simple but effective arrangements of grading, terracing and gardening.

The chief artistic value of these studies lies in their elucidation of the artistic possibilities of this splendid property, and their demonstration of the necessity of completing the present layout of the University grounds by a well-studied supplemental arrangement of the buildings and grounds south of

116th street. The grandeur of the Library and of its approach would be vastly enhanced by the vista between the buildings on the South Field, across the athletic arena to the proposed President's House on 114th street; and 116th street would become an axial avenue dividing two portions of a harmonious and complete scheme. The student body and student life would be provided with what they conspicuously need—a home and exercise ground, both of ample size and great dignity of aspect; future expansion would still be possible, and the Morningside Heights would be rendered attractive and impressive in the highest degree. The final treatment of the property may proceed on lines quite different from those suggested by these designs; but it cannot wholly disregard the dominant artistic considerations which this preliminary study of the problem has brought into such clear relief. The President's suggestion has certainly been fruitful of good results.

A. D. F. HAMLIN

COLUMBIA COLLEGE THIRTY-FIVE YEARS AGO

IN the discussion which has been aroused by the suggestion of the President of Columbia University that the college course might be shortened to two years for those students who propose to enter the professional schools, there has been made evident a belief that the old-fashioned four-year course of the American college is a sacred institution, its foundation being so ancient that the memory of man runneth not to the contrary. For this belief, however, there is little warrant. The American college was founded as a high school and was slowly elevated, as the years went by, until it began to expand into a university. At the beginning of the nineteenth century no American college was more than a high school, and at the end of the nineteenth century many of the colleges had already so far developed into universities that the organization of the

college itself was only with difficulty preserved. What we know as the American college with its four-year course seems to have developed itself in the first score years of the nineteenth century; and in the last score years of that century it was already beginning to disintegrate. The oldest American college, when Emerson was one of its undergraduates, seems to have been a rather unambitious high school—a high school which did not offer half the opportunities now obtainable in the best high schools of to-day—and the Harvard College of the present time is so very unlike the Harvard College of a hundred years ago that no one would ever suppose the former to have been evolved out of the latter, if one did not know that this contradictory evolution had in fact taken place.

In other words the old-fashioned American college, with its rigid four-year course, flourished for scarcely more than fifty years. It was the product of American conditions and it was suited to American needs. It had no exact parallel in any other country. It rendered an inestimable service to several generations of American youth. It has left its indelible mark upon the development of the United States. If it is to disappear, there will result a great loss to the community. If its best features can be preserved and adjusted to the changing conditions of the future, all those interested in education will have reason to rejoice. But it was not perfect; and it ought not to be regarded as a sacred thing. It represented nothing more than a certain definite stage in the evolution of the higher education in this country. It was not at all the result of a definite plan, for it was in fact only a growth; indeed, one might almost venture to call it a lucky accident. We who made our profit out of the opportunities it offered us, and who are what we are partly because of the training it gave us, are glad that our undergraduate days fell in this pause between changes. We look back to those days with pleasure; and we are inclined to idealize the institution to which we are indebted for so much that we value so highly. But excessive idealization is ever dangerous; and the indurated conservative is as antisocial as the veering radical.

The editors of the COLUMBIA UNIVERSITY QUARTERLY have asked me to record my recollections of the Columbia College of thirty-five years ago—the Columbia College which I entered as a sophomore in the fall of 1868—the Columbia College which only a few years before had moved to the corner of Madison Avenue and 49th Street. That part of New York had then scarcely begun to be built up; neither St. Patrick's Cathedral nor the Grand Central Station had been commenced; and there were foul cattle-yards just below the College, stretching from Madison to Fifth Avenue. Central Park was just about completed, after fifteen years of labor; but hardly a house yet skirted its edges, not even along its southern side. The College was then housed in a stately stucco building with an imposing classic portico—the building that came in time to be known as the *maison de punk*. This was flanked on the Madison Avenue side by a house used as a dwelling by one of the professors. On the other side was a corresponding building, the lower floor of which served as the chapel, while the books of the library were shelved on the upper floor. The official residence of President Barnard was on 49th Street, near Park Avenue; and hidden behind it on the 50th Street corner was an old sash-and-blind factory, altered to serve the needs of the recently established School of Mines. As the future *maison de punk* had begun life as an asylum for those who could neither hear nor speak, the taking over of this old factory suggested to the envious professor of another college an inexpensive joke about the curious connection of Columbia with the deaf, the dumb and the *blind*—a joke which the bard of my class avenged by an additional stanza to the "Son of a Gambolier," then the most popular of undergraduate songs.

The College exercises began at a quarter before ten, when we were all required to attend chapel, one member of the class being deputed to keep a record of our punctuality. The members of the faculty were also expected to be present at the daily service. As the entire undergraduate body was

supposed to be gathered together in chapel, it was there that the President could most easily address the students as a whole—a privilege of which he was wont to avail himself now and again. At ten we went to our first recitation; at eleven to our second; at twelve to our third; and at one we were free for the day. There were no recitations on Saturday. There were none after one or before ten, except in German; and as the instruction in German was an extra, not included in the required fifteen hours a week, it was given at nine o'clock so that the hours from ten to one might be free for the prescribed work.

I entered as a sophomore and not long after Dr. Anthon had withdrawn. In the course of my three years I received instruction from nine different professors and from one lecturer. Of those nine the only survivor is now the honored Dean of Columbia College. To Professors Drisler, Schmidt, Peck, Nairne, Van Amringe, and Short we recited our lessons in mathematics and languages just as we had recited them at school. Professors Rood and Joy lectured to us about physics and chemistry, performing themselves such experiments as they saw fit, for there were no laboratories for us students and we were never called upon to make any experiments for ourselves. The professors to whom we recited marked us carefully at every recitation, just as we had been marked at school. And the curriculum was just as rigidly prescribed as it had been at school. In our final year it was announced to us that an optional system had been adopted and that all seniors would hereafter be allowed a certain liberty of choice. We could give up Greek and take the calculus; we could neglect psychology and study geology in its stead; and we might abandon Latin in favor of Extra Physics—that is, a second course in physics in addition to that which had to be taken in senior year.

It is one of my pleasant memories that I chose Extra Physics and that I therefore had the privilege of hearing the late Professor Rood lecture for the first time on the undulatory theory, improvising the most of the apparatus he needed to

make his exposition of scientific principles unmistakably clear to our untrained minds. I remember Rood as somewhat austere and remote; but we liked him, and I think that at least a few of us appreciated him. We liked Short also, and we learned from him more than the Latin he was teaching,—I remember distinctly that it was he who first aroused my own interest in English versification,—but we laughed at certain of his personal peculiarities and we delighted to tease him by singing “Saw my leg off—*Short!*” just outside his door before we went in for our recitation. Being treated as school boys, it is small wonder that we were prone to behave like school boys; and our puerile high spirits sometimes led to overt disorder. In our senior year a course of lectures on the Evidences of Natural and Revealed Religion was frequently interrupted by all sorts of foolish antics.

I am sometimes inclined to wonder whether the atmosphere of the College was not far more boyish then than it is now. Perhaps the change is due to the fact that the average age of the undergraduate is a year or two higher now than it was then; I for one, was only nineteen when I was graduated in 1871. Perhaps it is the result of the greater freedom granted to the students. Perhaps it has been caused by the greater seriousness brought about in consequence of the presence of the graduate students, who now at Columbia far outnumber the undergraduates of the College itself. Whatever the reason, the fact seems to me beyond question. During my three years as an undergraduate I was witness of more or less disorder, not only in the halls but actually in the lecture-rooms; but during my twelve years of service as a professor I have not had occasion even once to call a class to order.

At one o'clock, after our three hours of recitations, the most of us went home. Sometimes in the fall a few of us lingered and got a scanty lunch from a frouzy lunch-basket, and kicked a football to and fro on the grass-plot in front of the main building—the grass plot on which the library and law-school building was afterwards erected. But it was seldom that

the grounds were not deserted by two. There was nothing to detain us there. There was no gymnasium. The library was open only from one to three. It was small, inconvenient, and very little used. To the best of my recollection I never entered it to read a book, and I never drew a single volume during the whole time that I was an undergraduate. It contained a scant fifteen thousand volumes—less than the average annual increase of the library nowadays. The one College periodical, *The Cap and Gown*, was a monthly; and it was not a newspaper but an attempt at a *Lit.* As there was little or no instruction either in English composition or in English literature, the few students who were trying to write did their best without either assistance or stimulus. The catalogue declared that Dr. Nairne was Professor of Moral and Intellectual Philosophy and English Literature; he also gave what instruction was given in history and in political economy. The work he attempted alone is now divided among twenty or thirty professors with many assistants.

There were two literary societies, the Philolexian and the Peithologian. I joined the former, which met, I think, once a fortnight, in a lodge room in the upper floor of what was then Wallack's Theatre, on the corner of Broadway and 13th Street. The order of exercises called for the reading of essays, for the delivery of orations and, finally, for a debate. I fear that this was all rather futile and perfunctory, although it probably did provide a chance for practice to the young fellow who was seriously striving to improve himself. I think that our real training in debate was rather in the various secret societies, where the subject for discussion was likely to have a flavor not purely academic. These secret societies were mightily interested in class politics, and they sought to control the elections in the the two literary societies, eagerly dividing among their own members the offices which were purely honorary. I remember that when the coalition to which my fraternity was a party achieved a majority, I was elected librarian of Philolex. I think I held the office for

more than one term; but I never saw the books, and I never even knew where they were stored. It gave me much pleasure therefore to discover, a few years ago, that they are now in the custody of the librarian of Columbia University.

The chief undergraduate festivity was the Students' Semi-Annual—and I take leave to suggest that this might be revived to great advantage. Indeed, I understand that in the future the prize-speaking for the Curtis medals is likely to serve a similar purpose. The Semi-Annual was in charge of the senior class, and it was held in the old Academy of Music about the middle of February. It consisted of an address by the class president, followed by orations from half a dozen other seniors, from four selected juniors, from two selected sophomores and by two addresses by representatives of the Philolexian and the Peithologian societies. The interstices of this juvenile oratory were filled by music. The boxes were gay with the prettiest girls in New York; and the body of the orchestra was packed with the admiring families and friends of the speakers. A delegation of the seniors acted as marshals, in caps and gowns, and with wands of command authorizing them to conduct the parents and the pretty girls to the places reserved for them.

At Commencement there were half a dozen more speeches, so that the thirty-one members of the class of '71 who received their degree had had every opportunity to reveal such oratorical ability as they might chance to possess. The class-day exercises were very much what they are now; indeed, the class-day tradition is the only one familiar to me as an undergraduate which I find as flourishing to-day as it was then. The giving of the Goodwood Cup to the most popular man in the class was abandoned only a few years after I was graduated, because of the ill-feeling it had engendered. The burial of Bojesen—a detested manual of classical antiquities—was not celebrated by my class, which held a supper instead; but it was revived a little later and it expanded in time into the burlesque of a Roman triumph, only to be abandoned at last because it became boisterous, not to say riotous.

It may seem strange to some that I have here set down no memories of our athletics. The fact is that I have really no memories to set down. As I have noted, we had no gymnasium; naturally, therefore, we had no swimming pool and no fencing hall. We had no boat house and no crew. We had no baseball nine; and although our first football team may have come into existence while I was an undergraduate, I think that it was not organized until after I had entered the law-school, in the fall of 1871. I can recall going over to the Elysian Field on the Hoboken shore to see this team defeated by a team from Rutgers College, that must have been quite as ragged and as ill-trained as our own. As I turn the pages of our class history, I am reminded that the "Athletic Association of Columbia College" held its first meeting toward the end of my first year, and that one of my classmates carried off four prizes; and I am reminded by the College catalogue for 1871 (which I had bound up with the class history) that I was once the treasurer of this Athletic Association, although I have no recollection whatever of any money either received or disbursed.

As I look back across the long years I can recognize now that it was not a strenuous life we were leading in those remote days. Yet it was worth while; it did us good, even if we did not get out of it all the good it contained, even if we were not all of us making the best of all our opportunities. Scanty as those opportunities may seem to twentieth century students, they were probably as wide and as rich as any then available at the other colleges in the United States—except, it may be, at one or two institutions which were even then beginning to feel the faint thrill of a new birth. No, it was not a strenuous life, but it was very pleasant while it lasted; and now that it has gone beyond recall, it is ever a most delightful memory.

BRANDER MATTHEWS

A HISTORY OF COLUMBIA DRAMATICS

III*

SECOND PERIOD: THE COLUMBIA COLLEGE DRAMATIC CLUB
1887-1893 [*continued*]

THE college year of 1888-89 opened with an overwhelming list of announced "entertainments." The Sophomores were to give one to pay off debts incurred by their crew and base-ball nine; a "Mammoth Minstrel Performance" was to be given for the benefit of the University Base Ball Association; and the Senior class was to present an entertainment comprising amateur theatricals,—all this besides the regular production of the Columbia College Dramatic Club. Indeed, as *Spectator* said: "Entertainments seem to be very popular as a means of raising money." The first two were carried off with moderate success. The Senior Entertainment, February 28, 1889, deserves more detailed notice. The programme was in two parts. It opened with the *Nad'jy* march and other music by the College amateur orchestra, under the leadership of Mr. W. L. Bogert, later quite noted in college musical matters. Then came a series of recitations. Mr. Henry B. Ely was very amusing in Irish character impersonations. Mr. Coward,—quite indispensable in Columbia entertainments, it would seem,—also gave selected readings. A male quartette sang several songs, with only a fair degree of success. Mr. C. L. Burnham was roundly applauded for a timely parody on the amateur stage; and Messrs. L. W. Ely and S. V. W. Lee, in a banjo duet, closed the first part of the programme. The second part consisted of a one-act farce, *Grimshaw, Bagshaw and Bradshaw*. The cast is not free from all flavor of the Dramatic Club:

* The preceding installments of this History were published September, 1902, and March, 1903: COLUMBIA UNIVERSITY QUARTERLY, IV, pp. 377-383, and V, pp. 174-181.

<i>Peter Grimshaw</i>	Robert L. Cutting
<i>John Bagshaw</i>	W. J. Barlow
<i>Bob Bradshaw</i>	Geo. D. Numford
<i>Liceum Towser</i>	Addison Steele
<i>Emily</i>	Willard V. King
<i>Fanny Sparks</i>	Hammond Odell

The play went smoothly. Mr. Cutting's acting was naturally the best, for he had had considerable experience. The least successful work was done in the impersonation of Emily, whose femininity consisted of "a pair of high-heeled slippers, a Psyche Knot and some chewing-gum."* Mr. Hammond Odell's Fanny was far more natural.

Although the Columbia College Dramatic Club omitted its mid-winter performances in this year (1888-89), the extravaganza given in the spring made ample recompense for this deficiency. *William Penn, or the Romany Ryes of the Quakers*, Mr. G. A. Morrison's second burlesque on early American life, was, beyond the shadow of a doubt, the greatest dramatic achievement of Columbia, up to that time. It was given in aid of the University crews on the evenings of April 24, 25, 26 and 27, with a matinée on Saturday the 27.

The scene of the play was laid in Philadelphia. Time 1682. There were three acts. Mr. Bond, of Daly's Theatre, coached the production. Mr. W. L. Bogert, '91, led the orchestra, which rendered very satisfactorily the music of the operetta, and also an entr'acte specially composed by the leader himself. There seems, as usual, to have been trouble at rehearsals, but all the rough corners were finally polished away, and *William Penn* went down in Columbia dramatic history as one of the great successes.

The cast was as follows:

<i>William Penn</i>	Robert L. Morrell, '89 L.
<i>Chanticleer de Rooster</i> (a rich but honest blue-blooded billionaire)	J. G. Buckley, '89 L.
<i>Rychie de Rooster</i> (his only son).....	E. F. Coward, '83 L.
<i>Samuel</i> (a gypsy vagrant well connected in New Jersey, commonly called the corkscrew).....	R. A. Morrison, Jr., '89 L.

* *Columbia Spectator*, March 7, 1889.

Count I Promessi Sposi (a high-born noble of the Italian Opera School).....R. L. Cutting, Jr., '89
Ruth (a guileless orphan) { Adopted daugh- { E. M. Post, '92
Sibyl (a gypsy beauty) { ters of Penn { T. H. Kelly, '89 L.
Mistress Tabitha (Matron of the Day Nursery and Orphan Home) Jas. W. Gerard, Jr., '90

Marie O'Toole (a fashionable maid from Paris, *via* Cork direct) H. B. Culver, '90

Première Danseuse.....T. H. Kelly, '89 L.

Corps de Ballet. .Messrs. Barlow, Hoadley, La Farge, McKeever, Ranger, B. Stein, Taylor, Warburton.

Babies, amateur yachtsmen, villagers, Quaker maidens, horse marines, and gypsies.

Synopsis of Scenes:

Act I. *The Troth-Plight*.—A village on the banks of the Delaware.

(Lapse of 10 years.)

Act II. *The Bridal Morn*.—The City Hall in Philadelphia.

Act III. *The Gypsy Encampment*.—A glade in the forests primeval of Fairmount Park.

The performance was in every respect superior to *Captain Kidd*. In the first place, Mr. Morrison, although working along the same lines, produced, in *William Penn*, a far stronger and brighter book. The staging, too, was more pretentious; and the players, through added experience, did better work. It was quite the thing to compare all the different features of *William Penn* to the professional stage. The libretto was said to be in part as good as Gilbert's. Mr. Bogert's intermezzo was "worthy of Sir Arthur Sullivan." All in all, this production was undoubtedly "one of the finest ever seen on the amateur stage."*

William Penn was the first Columbia 'Varsity show to do any considerable traveling. Among other stands, it showed at the Brooklyn Athenæum, for the benefit of the Foot Ball Association, May 2; in Yonkers on the following day; in Washington, D. C., during the same week; and two farewell performances were given May 18, at the Berkeley Lyceum, New York.

* *Columbia Spectator*, May 9, 1889.

Whether we are willing to accept the extravagant praise which the rather wonder-stricken college-world heaped on *William Penn*, or not, we cannot do otherwise than proclaim it far and away the best Columbia show up to that day. The Dramatic Club was so delighted with Mr. Bogert's services as musical director that it presented him with a gold-mounted baton. Everything—acting, dances and songs—went off with a creditable smoothness and snap. The Columbia College Dramatic Club succeeded in giving a 'varsity show which was to set a standard for the future.

The dramatic season of 1889-90 opened with the C. C. D. C. mid-winter performance. *Whittington, Jr., and his Cat*, a musical burlesque, was given at the Berkeley Lyceum, during the week beginning January 13. The production was for the benefit of the Skin and Cancer Hospital—a very startling fact, and one which the Dramatic Club felt itself bound to explain on the ground that it did not feel capable of handling the finances of two shows a year; and as the managers of the hospital took charge of the sale of seats, the Club was relieved of responsibility. It might, then, well be asked, why were these mid-winter shows given at all? This was answered by the argument that they brought out new material for the regular spring performance, and that the experience was excellent for all hands in a variety of ways. It was proposed to try a number of new men in the cast and chorus; and this plan was, to some extent, carried out, as will be seen from the following:

<i>Dick Whittington, Jr.</i>	R. L. Morrell
<i>Emperor of Morocco</i>	R. L. Cutting, Jr.
<i>Sir Highburg de Barne</i>	J. W. Gerard, Jr.
<i>Alderman</i>	E. J. O'Sullivan
<i>Muley</i>	K. M. Murchison*
<i>Two Clerks</i>	{ T. Field*
	{ J. D. Dorr*
<i>Rose</i>	W. Wall*
<i>Mrs. Callipash</i>	J. R. Blake*
<i>The Cat</i>	A. V. Stout*

The choruses comprised fifteen members.

* New men.

The production, though financially successful, was marked by a distinct falling-off in quality. The play itself was "the veriest trash";* and with such material, although it was considerably improved by alterations and interpolations, and handsomely mounted, it was of course impossible for even first-class amateurs to make a great success.

On March 21, 1890, the Freshman class gave an entertainment, at the Berkeley Lyceum, for the benefit of their crew. Besides songs and music by the Glee Club, Banjo Club, and College Orchestra, there were variety acts by the following men: J. D. Dorr and H. B. Culver; Wall and Comanchio (Chinese act); Alexander and Murchison (negro act); and Hess and Shayne (Dutch act). The show was good, for what it was, but the attendance was rather poor.

It was during this season of 1889-90 that the second attack upon the Columbia College Dramatic Club was made, again on the ground of its exclusiveness. The Columbia College Comedy Club was organized in opposition. The founders realized that they could not hope to compete, for some time at least, with the older body in the character of its productions. But something would be accomplished: the field of dramatics would be opened to new men.†

But the organization did not get beyond the organizing stage: there is no performance on record.

The 'Varsity show of the Dramatic Club for 1889-90, *Lafayette; or the Maid and the Marquis*, by George Austin Morrison, Jr., was another success. It was produced at the Berkeley Lyceum, on April 23, 24, 25, and 26, with a matinée on the last date.

The cast was:

* *Columbia Spectator*, January 29, 1890.

† The members of the Comedy Club were: President, W. J. A. McKim (Law); Secretary, K. M. Murchison, Jr., '93 (Mines); and J. D. Dorr (Law), J. R. Blake (Law), J. Travis (Law), A. B. Ripley (P. and S.), B. J. Robertson (Law), A. K. Alexander, '93 (Mines), C. H. Aldrich, '93 (Mines), A. C. Gildersleeve (Law) and C. F. Adaé, '92 (Mines).

- The Marquis de Lafayette* (a democratic republican aristocrat)
Robert L. Morrell
- Roquefort de Brie* (a wicked abbé of the Ancienne [*sic!*] Régime)
R. T. Wainwright
- Don José Alfonso Intimidación la Rosa* (a Cuban noble in the Havana cigar trade).....R. L. Cutting, Jr.
- Captain Paul Jones*, U. S. N. (smuggler and privateersman)
J. C. Travis
- Dodo* (village innkeeper).....J. D. Dorr
- Suzanne* (sole surviving twin daughter of "Dodo")
G. M. Anderson
- Ysabel* (sister of Don José, owing her beauty to Castile, not to Pear's Soap).....O. H. P. La Farge
- The Duchess of Monmouth Park* (one of the coming race)
Henry B. Culver
- Première Danseuse*.....P. H. P. La Farge
- Brittany peasants, gendarmes, *bonnes* with infants in arms, jockies, bathers, chappies, Uncle Sams, Columbias, etc., and a complete corps de ballet.

Synopsis of scenes:

Act I. *The Proxy Marriage*.—A village on the coast of Brittany, France.

Act II. *The Mormon Divorce*.—The West-End Hotel at Long Branch, U. S. A.

Act III. *The Matrimonial Exchange*.—The Ball Room in the Capitol at Washington.

The orchestra was again conducted by Mr. Bogert. The whole production was under the direction of Mr. Bond of Daly's.

Lafayette was in many ways a step in advance. The cast was, with a single exception,* composed of *bona fide* Columbia men—a fact which led the student body to believe that the Columbia College Dramatic Club was mending its ways, and that theatricals would soon be on a fair footing at Alma Mater. In other respects, too, *Lafayette* was a show of which Columbia might well be proud. The production was still more elaborate and the acting and singing were stronger and more finished than in its predecessor, *William Penn*. Both scenery and costuming had very nearly reached their present state in Columbia 'varsity shows.

* H. B. Culver.

Mr. Morrison's book was not quite as good as its production. Had it not been preceded by *Captain Kidd* and *William Penn*, it might have been considered very bright and original; but it was precisely because *Lafayette* was little more than a polished and rearranged second edition of the Quaker and a third of the Pirate play that it was felt to pall a little. The puns came thick, fast, hot, and heavy; but is there anything quite so dolorous as a long string of puns that fall flat? Some good and novel effects, however, were got out of a phonograph, used to develop complications, and a mock horse-race and circus clowns. In spite of all deficiencies, *Lafayette* served its purpose,—that of setting off a troupe of amateur male actors to the best effect in broad burlesque.

Lafayette was revived by the Columbia College Dramatic Club, on December 30 and 31, 1890, and January 1, 2, and 3, 1891. These performances were for the benefit of the Swedish Episcopal Mission and the club's reserve fund. Several changes were made in the cast: La Farge was supplanted by G. Hogan, Wainwright by H. Lamb, and Cutting by O'Sullivan. Other alterations, on a large scale, improved the chorus. G. A. Morrison, Jr., the author, led the orchestra. The production was very successful, indeed; the play was given again in whole or in part at Morristown on January 9; at a Casino benefit on March 17; at New Haven on May 2. The second act was given at the Garden Theatre in honor of Mr. and Mrs. Kendall on April 23, together with other plays of the spring repertoire.

On January 7, 1891, another attack was made on the Club. It was based on the old charge, that of exclusiveness:

As long as the present methods of the Columbia College Dramatic Club continue, its prosperity, from the point of view of the College, must ever be tinged with an unpleasant reflection. The Dramatic Club, in spite of its name and its pretences, is very far from being a representative organization of Columbia. And this for one cause or another, has been true ever since the Club began its existence. It appears, indeed, that the Club owes its origin to one particular clique in the College. However that may

be, up to the last year or two this clique has had absolute control over the Club, and has used the control for its own selfish ends, totally ignoring any claim the College might advance to a voice in an enterprise that is supposed to represent it. In the last year or two, it is true, this state of affairs has been slightly modified; but unfortunately the recent productions have been of such a character as to be as little, if not less, representative of the College than were the majority of their predecessors.

Indeed, we doubt if there was any glaring exaggeration in the remark made by an undergraduate at one of the recent performances of *Lafayette*, that "there was only one *bona fide* Columbia student in the whole lot"; and this observation might even be extended to the management without a great loss of veracity.

Now, in view of the fact that the Club has been kind enough to turn over a share of its profits to the College for use in athletics, it might perhaps be ungrateful to suggest, as additional food for reflection, that the proceeds from the performances given last week are to be equally divided between a mission fund and the coffers of the Club. This is not the first time, to be sure, that the Club has given performances, early in the year, for its own benefit or for charity. On such occasions, however, it has usually excused itself with the plea that these performances are only preparatory to the regular spring work, and are of great service in the way of developing new talent. But if the performance given last week be approached in this light it cannot fairly be characterized as altogether satisfactory. What was there in this recent display of the Dramatic Club to entitle it to the use of the College name and the support of our undergraduates in the choruses?*

This was pretty plain language, and might have been expected to lead to an immediate breach. But *Spectator* itself soon came out with an announcement of the regular spring performances, and expressed hopes for the success of the club and that the suggestions would be put into practice.

The spring season (1891) of the Columbia College Dramatic Club was the largest and most important as yet in its history. It extended over the two weeks beginning March 11. Financial and social success was assured in advance by an excellent

* *Columbia Spectator*, January 7, 1891.

list of patronesses and the following distinguished patrons: Vice-President Morton, the Mexican Minister, the Turkish Minister, Secretary Tracy, Chief Justice Fuller, General Howard, Mayor Grant, and Cornelius Vanderbilt. The performances were for six different benefits: the Babies' Hospital, the Sisters of the Assumption, the Washington Arch, the Sherman statue fund, the Columbia College Athletic Union, and the Dramatic Club reserve fund. An effort was made to eclipse all previous achievements, and the effort was eminently successful. A large bill was given: *William Penn*, a new operetta, *Narcissa*, and several other plays. A number of young ladies were invited to take parts.

The various casts follow:

William Penn, by G. A. Morrison, Jr.

<i>William Penn</i>	Robert Lee Morrell
<i>Chanticleer de Rooster</i>	John Dennis Dorr
<i>Rychie de Rooster</i>	Joseph G. Lamb
<i>Samuel</i>	Oliver H. P. La Farge
<i>Count I Promessi Sposi</i>	Robert L. Cutting, Jr.
<i>Ruth</i>	Geo. M. Anderson
<i>Sibyl</i>	Harry M. Paddock
<i>Mistress Tabitha</i> }	Eugene J. O'Sullivan*
<i>Marie O'Toole</i> }	
Sailors, city-troops, Quakeresses, baby chorus, villagers and gypsies.	

Narcissa, by G. A. Morrison, Jr.

<i>Sir Harold Harkaway</i>	Robert L. Cutting, Jr.
<i>Barnabas Buncum</i>	Joseph G. Lamb
<i>Rick Briarthorne</i>	T. Hugh Kelly
<i>Bartholomew Buzzle</i>	H. B. Culver
<i>Squire Higgins</i>	Lee Tailer
<i>Mistress Prim</i>	Miss E. L. Black
<i>Lady Evelyn Oldacres</i>	Miss D. Thomson
<i>Narcissa</i>	Miss Hoyt

Male chorus of twelve. Female chorus of twelve.

The scene of the opera was laid in Old England and the atmosphere was well given. It was a very pretty play, and

* In consequence of Mr. O'Sullivan's inability to appear, Mr. Hatch took these parts.

was thoroughly rehearsed under the direction of Richard Barker, of London. *Narcissa* was not as broadly farcical, and did not depend so largely for its fun on horse-play as did the earlier Morrison extravaganzas. Because of this novelty, as well as on its merits, it was received with favor.

Two Roses, a comedy in three acts, by James Albery

<i>Digby Grant</i>	Walter Cutting
<i>Mr. Furnival</i>	E. F. Coward
<i>Caleb Dercie</i>	R. L. Morrell
<i>Jack Wyatt</i>	R. L. Cutting, Jr
<i>Our Mr. Jenkins</i>	Nicholas
<i>Thomas</i>	F. M. Warner
<i>Our Mrs. Jenkins</i>	Miss Marveil
<i>Lotty</i>	Miss Rita Lawrence
<i>Ida</i>	Miss Lawrence
<i>Mrs. Cups</i>	Miss Helen Fuller

The following three plays were rehearsed under the direction of Mr. Nelson Wheatcroft of the Lyceum Theatre:

The Electric Spark

<i>Mrs. Templeton</i>	Miss Alice Lawrence
<i>Mary Durant</i>	Miss Rita Lawrence
<i>Captain Crichton</i>	Mr. R. L. Cutting, Jr.

Fennell. Adapted by Mr. Jerome K. Jerome, from M. François Coppée, and produced for the first time in America

<i>Ferrari</i>	Mr. O'Sullivan
<i>Phillipo</i>	Mr. Morrell
<i>Sandro</i>	Mr. McClintock
<i>Jiamina</i>	Miss Lawrence

The Corsican Legacy

<i>Philippo Geronimo</i>	Mr. Dorr
<i>Jerry Ominous</i>	Mr. Morrell
<i>Bambogetti</i>	Mr. R. L. Cutting, Jr.
<i>Captain Leoni</i>	Mr. Dennis
<i>Brigadier</i>	Mr. Anderson
<i>Rosetta</i>	Miss Catlin

The comedies were given to prove that the members of the Dramatic Club could do work on other lines than broad bur-

lesque, and were very successful. New scenery was painted for the occasion by Leavy, and the costumes, as might be expected, were elaborate. The acting was very creditable. The appearance of young ladies in a Columbia show for the first time in years* was regarded with a diversity of opinion; but their performances were good. The singing of the female chorus in *Narcissa* was rather weak, but their presence was very pleasing. Artistically and financially, in fine, the Dramatic Club's performances of 1890-91 were very satisfactory. But there was something distinctly unsatisfactory about them: the tone of these Columbia productions was too uncollegiate, and the variety of benefits to which the profits were devoted was severely criticised.

ALISON M. LEDERER

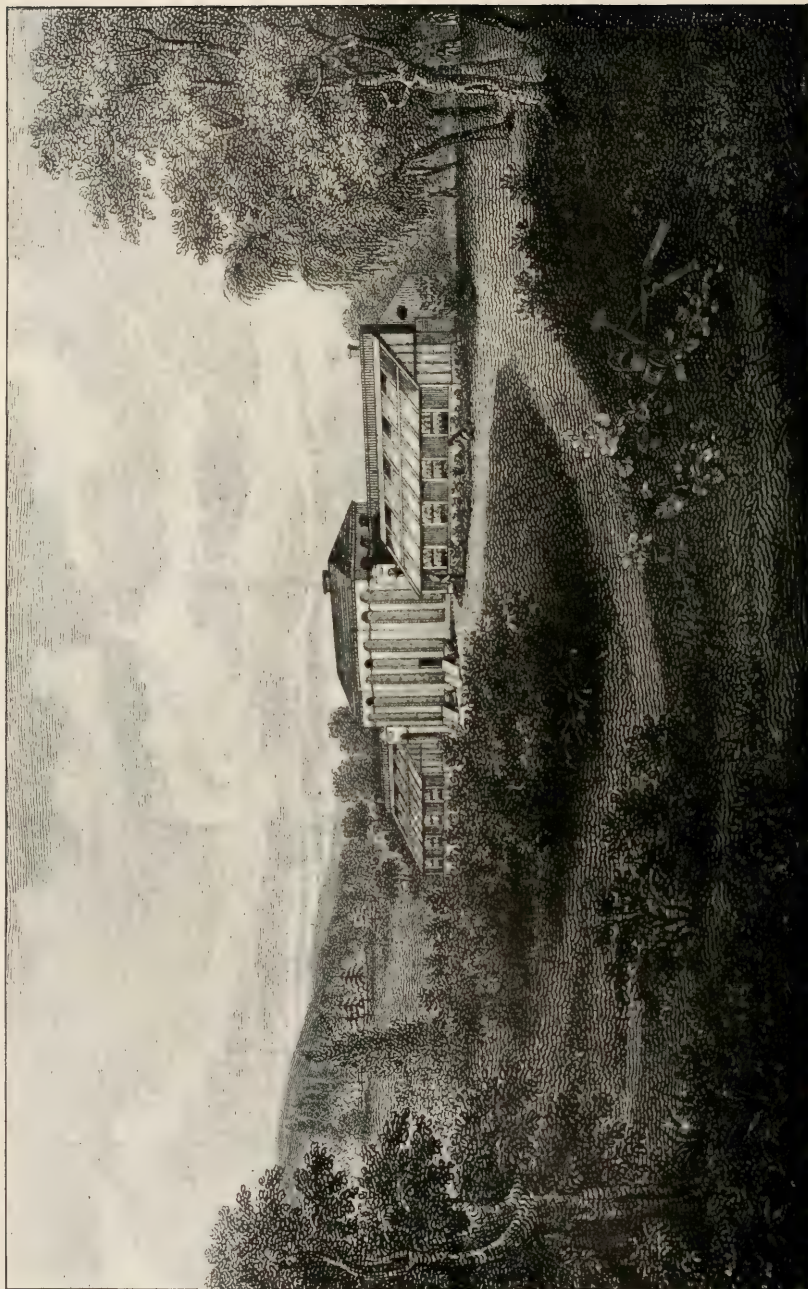
THE DEPARTMENT OF BOTANY

AND ITS RELATION TO THE NEW YORK BOTANICAL GARDEN

THE subject of botanical gardens will ever possess unusual interest to the friends of Columbia University because of the peculiar relation which the financial standing of the University bears to the first botanical garden of New York a century ago. Samuel L. Mitchell, the founder and long the first president of the old Lyceum of Natural History (now the New York Academy of Science); David Hosack, the founder of the Elgin Botanical Garden; John Torrey, the Nestor of American botany; and Nathaniel Lord Britton—these are four of the five names that appear on the roll of the University in the Department of Botany prior to 1896,† and

* Nine years. See COLUMBIA UNIVERSITY QUARTERLY, IV, p. 382.

† The complete roll with date of service is as follows: Richard S. Kissam (1792-1793); Samuel L. Mitchell (1793-1795); David Hosack (1795-1811); John Torrey (1860-1873); Nathaniel Lord Britton, adjunct professor (1890-91), professor (1891-1896), emeritus professor (1896); Lucien Marcus Underwood (1896—).



HOSACK BOTANICAL GARDEN, 1801
FIFTH AVENUE AND FIFTY-FIRST STREET

each of the last three deserves special notice in connection with the development of the present condition of botany in New York. Hosack and Torrey were more closely connected with the College of Physicians and Surgeons, where instruction in botany was formerly a part of the medical course, and Britton was really the first to give instruction in Columbia College proper. At this time, however, it is unnecessary to consider these details, and the development of the science of botany in New York may be treated as a unit in which Columbia has ever been a leading factor.

The Elgin Botanical Garden* was located between Fifth and Sixth avenues just below Fifty-First Street; but during its brief existence in the first decade of the last century it was too far out of town to be much visited by the residents of the small city at the lower end of Manhattan Island. It was soon given to Columbia College to manage as a botanical garden; and finally, in exchange for certain land-claims which the College held against the State, it was made over to the Trustees of the College to use as they pleased. It has ever since remained a part of the University property; and the income from its rentals forms no inconsiderable portion of the available assets of the University. A most interesting memorial of the Elgin Gardens is still to be seen in the two noble yews that flank the steps leading to the University library. These stood originally in the Elgin Gardens and were early transplanted in what is now South Field, whence they were removed to their present position during the winter of 1894-95.

It will perhaps not be amiss to diverge a moment to another work performed by David Hosack, inasmuch as it bears directly upon the development of botany and botanical instruction in America at large. A young law student, Amos Eaton by name, came under Hosack's influence and was a fre-

* A large painting of the Elgin Garden which has long been in the possession of the Hosack family has recently been presented to the New York Botanical Garden.

quent visitor at the Elgin Gardens. Soon afterwards he became a teacher of the science. His class in botany at Williams College, which contained every student at the college but two, unanimously requested the privilege of publishing the manuscripts of his work in botany. This formed the first of a series* of botanical manuals which passed through eight editions and were the forerunners of a later series which Asa Gray carried through five additional editions during his lifetime. Eaton was afterwards connected with the school of engineering at Troy. While detained in a debtor's prison in New York City for the supposed mismanagement of an estate in Columbia County, he amused himself, as he related long afterwards, by giving instruction in botany to the son of his jailor. The bright boy who thus drank in his first inspiration in botany from Eaton, and who was afterwards a student under Dr. Hosack, was none other than John Torrey.†

When the annals of American botany are finally written, no name will have a more conspicuous position than that of John Torrey. An enthusiast in botany almost from boyhood; a life-long devotee of the science; a master in the art of botanical description and illustration; a world-renowned writer of botanical memoirs; a man of simplicity of life and manner, of becoming modesty regarding his own merit, of unblemished integrity and worth,—John Torrey, both as a man and a botanist, holds first place in our science. In what degree Torrey had made New York a botanical center as early as 1831, is seen in the fact that Asa Gray, restive in his work in central New York and casting about for a place where he could study botany, could find no better tutelage than under

* A copy of this first edition, now one of the rarest works on American botany, was recently obtained by the librarian of the New York Botanical Garden in an old book shop in the city. With characteristic modesty Eaton refrained from placing his name on the title page.

† Amos Eaton was the grandfather of the late Daniel C. Eaton, who was a pupil of Asa Gray and afterwards became the first professor of botany at Yale. His library and collections form the foundation of the present department of botany in that University.

Torrey, and came to New York as Torrey's pupil. Later Torrey associated Gray with himself in the preparation of the "Flora of North America," a work that will ever stand as a classic in American botany, combining with the critical acumen and exact learning of its senior author the enthusiasm and push of its more youthful one. Gray remained at New York until, in 1843, he received his call to Harvard University, where he established a second center of botanical research. The annexation of Texas, as the second of our acquisitions of Spanish territory; the Mexican war and the commencement of our expansion policy in the acquisition of California and New Mexico, with the attendant military occupation and exploration for the settlement of boundaries; the discovery of gold in California in 1848 and the resultant development of that Eldorado of immigration; and finally the transcontinental railroad projects of the early fifties,—all these movements brought to Torrey and Gray the floral wealth of new territories, and made the Torrey herbarium at New York and the Gray herbarium at Cambridge two great repositories of the early types of western plants, each supplementing the other in their priceless possessions.

At Torrey's death, in 1873, his entire collection and his botanical library came into the possession of Columbia College. It was for many years located in a house on Madison Avenue, whence it was first removed to a precarious position in the "maison de punk," and thence to the crowded quarters in the uppermost stackroom of the library building on Forty-Ninth Street. The botanical museum not being ready at the time of the sale of the old site, the collection was temporarily placed in 502 Schermerhorn Hall until it was finally deposited with the New York Botanical Garden in 1898.

About the time the College came into the possession of the Torrey herbarium, two other large collections were acquired through the generosity of John J. Crooke, Esq., *viz.*, the Chapman herbarium, on which Dr. A. W. Chapman of Apalachicola,

Florida, had based his "Flora of the Southern States," and the Meisner herbarium, which had been accumulated by Professor C. F. Meisner of Basel, one of the prominent contributors to De Candolle's "Prodromus." The shifting of the sheets of these three great collections into a single series formed one of the first pieces of botanical work of a young man who afterwards became professor of botany in Columbia and, at his retirement in 1896, the youngest emeritus professor of any American University. This piece of work, which to an ordinary student would have been merely mechanical, became to the alert mind of Dr. Britton a most valuable botanical education; and the impressions of relationships of the parts of the botanical system which he then gained have never been forgotten. A sheet once seen was so impressed on his memory that it was always remembered; and to this day it is the marvel of all his associates that he can so readily locate a given plant preserved in this enormous collection. So long as the College remained at Forty-Ninth Street, the congested conditions precluded the development of any except rudimentary laboratories; and Dr. Britton most wisely employed his energies and his departmental appropriations in the enlargement of the collections and the completion of the botanical library. In this way collections and books that are no longer obtainable were added to our stores; and when the transfer of the library and herbarium was finally made to the Garden, they contained over 5,000 bound volumes, besides quantities of unbound pamphlets, and nearly a half million specimens.

It was during Dr. Britton's professorship that Barnard College was organized, and the Department of Botany was the first to be established in that college under the efficient leadership of Dr. Emily L. Gregory, who held the position until her death in 1897. Dr. Britton for a time was acting dean of Barnard. He was also active in the organization of the graduate School of Pure Science, and was secretary of its faculty until his resignation in 1896.



BOTANICAL MUSEUM, BRONX PARK, 1903

Dr. Britton's efforts had long been exerted in promoting botanical work, not in Columbia College only, but in a wider field. Through the Torrey Botanical Club*—an organization that had grown out of occasional meetings of local amateur botanists about Dr. Torrey during his later years—Dr. Britton and others commenced a systematic movement toward the formation of a botanical garden in New York. Into this work Dr. Britton entered with characteristic energy and quiet enthusiasm, and the present development of the New York Botanical Garden stands as a living monument of his service to botany in America. The patient endurance of adverse criticism during the Garden's formative period; the adroit management of all the intricate and often delicate problems that have arisen in its development; the broad-minded views involved in the plans for its scientific equipment; the consummate skill with which a most harmonious body of workers has been brought together, and the prodigious amount of scientific work accomplished in the midst of trying administrative details—these are best known to the men who have been associated with Dr. Britton in his far-sighted undertaking.

The New York Botanical Garden is a corporation established by an act of the State Legislature, first passed in 1891 and amended in 1894. Its Board of Managers is composed of (1) *ex-officio* members, *viz.*, the mayor of the City of New York and the president of the Department of Public Parks; (2) elected managers, to the number of twelve; and (3) scientific directors. The last body, which, according to the act of incorporation, has "the management and control of the

*The Torrey Club commenced the publication of a monthly four-page *Bulletin* in 1870. Its twenty-ninth volume, containing vi + 725 pages and 26 plates, has just been completed. Besides this, it began in 1889 the publications of *Memoirs*, which have now reached the twelfth volume, and more recently a smaller monthly, *Torreya*, now commencing its third volume. During the year 1902 the total scientific publications of the Club aggregated 1761 octavo pages and 90 plates, which exceeds that of any other scientific organization in America.

scientific and educational departments" of the corporation, is composed of the president and the professors of botany, geology and chemistry in Columbia University, the president of the Torrey Botanical Club, the president of the Board of Education of the City of New York, and such other persons as may be elected by the Board of Directors and approved by the entire Board of Managers. At the present time only one person, Dr. H. H. Rusby, has been thus elected, so that of the seven members of this board, four are representatives of the University.

The act of incorporation also authorized the setting aside of two hundred and fifty acres of park land, and the erection by the City of a fire-proof museum building and conservatories for the culture of tender plants at an expense not to exceed \$500,000, conditional on the raising of an endowment fund of not less than \$250,000 by the Board of Managers.

Subscriptions were soon opened for this endowment, Columbia University standing at the head of the list with a subscription of \$25,000, and in June, 1895, the fund reached the statutory amount of \$250,000. Dr. Britton, who had been connected with the development of the Garden from the outset, and who had personally gone over the available park land and had selected the north end of Bronx Park as the most desirable site for a garden, was chosen director in 1896; and the writer was elected to the professorship in Columbia thus vacated. After various delays the explanation of which may be left to the future historian, the plans were accepted, the building fund was appropriated by the City, and ground was broken for the museum building in December, 1897. The museum, completed except for the two wings left for future expansion, was handed over to the director in 1899. Ground for the large conservatory was broken in January, 1898, and the first plants were installed in about three-fifths of the completed structure in June, 1900; the remaining portions were completed, by the aid of a subsequent appropriation, in May,

1902. Grading and planting the grounds have proceeded as rapidly as possible and, with the working out of the present contracts, the ground plans will be fairly established on permanent lines.

The scheme of the Garden is primarily educational; and, as an educational institution it is maintained by the City, like the Museum of Natural History and the Metropolitan Museum of Art. The educational features of the Garden can be summed up under the following heads:

A. *For the education of the general public.*

I. PLANTATIONS.

1. Herbaceous grounds, containing such plants as will grow in the open, arranged according to natural relationships.
2. A fruticetum, containing hardy shrubs or low woody plants similarly arranged.
3. An arboretum, with named examples of hardy trees arranged in family groups as far as possible. (In some instances it will take years to furnish mature examples, but there are already in the park many fine trees of numerous species.)
4. Conservatories, for plants too tender to endure the climate at our latitude. These are arranged, as far as needs of cultivation permit, in family groups.

II. MUSEUMS.

1. A floor of the museum building devoted to exhibits showing the relation of plants to man or, in other words, economic plants, their products and methods of preparation.
2. A floor devoted to exhibits showing the relations of plants to each other, consisting of illustrations by various means of the structural characters of the various types of plants. A feature of this series is the exhibition in swinging frames of specimens of all native plants of the local flora, *i. e.*, those growing within 100 miles of New York City.

3. A palæo-botanical exhibit showing the types of fossil plants. The rich accumulations made under Professor Newberry and Dr. Hollick, and deposited by Columbia University, form the basis of this collection.

III. LECTURES. A course of popular illustrated lectures, given at present each Saturday afternoon during spring and autumn.

B. *For the education of botanists.*

I. LABORATORIES. These occupy the entire upper floor of the museum building and are fitted up for research instruction in every phase of botanical work—physiological, pathological, economic, taxonomic. These are supplemented by special rooms in the nursery greenhouses for experimental work—rooms which can be set aside for students' use as required.

II. LIBRARY. The botanical library now numbers over 12,000 volumes, having more than doubled since the removal of the Columbia nucleus to the Garden. Botanical periodical literature is especially well represented.

III. HERBARIUM. The combined collections of Columbia and the Garden now amount to over a million specimens. Additions are made at a rate of over fifty thousand specimens a year. During two exceptional years, over two hundred thousand specimens were added.

During the calendar year 1902 forty-four research students were registered at the Garden for longer or shorter periods. This list includes the graduate students of the Department of Botany at Columbia and others who are primarily registered at the Garden. In all, graduates of thirty-one colleges were represented among these research students.

At the last meeting of the Board of Managers two scholarships for advanced workers were established, of sufficient value to cover necessary living expenses. They are intended for

persons who are prepared to carry on for a definite period (two to six months) some line of research and who can profitably use the extensive facilities offered at the Garden. This is practically a new type of scholarship: it is not intended for the ordinary graduate student, but for such as have already passed the period of their novitiate.

The scientific work of the Garden is conducted on various lines and is proceeding as rapidly as financial encouragement will permit. The following are some of the undertakings completed or in progress:

1. Exploration of regions little known botanically. During the past three years exploring parties, larger or smaller, have visited the following regions: Bermuda, Newfoundland, Nova Scotia, Arizona, Texas, California, Colorado (2), Montana, St. Kitts, Puerto Rico (2), Jamaica, Florida (2), Mexico, Sumatra, and Bolivia. Exploring parties are at present in Mexico, Honduras, Jamaica, and Cuba.

2. The preparation of floras of definite regions. While not an official publication accredited to the Garden, Dr. Britton's "Flora of North-Eastern America" may be mentioned as a part of the work of the staff. Dr. J. K. Small also is printing a "Flora of the South-Eastern United States," which will soon be issued, and Dr. P. A. Rydberg has in preparation a similar "Flora of the Rocky Mountain Region."

3. The North American Flora. This work had its inception in a correspondence between Dr. Britton and the present writer early in 1893. Plans were soon after formulated for the publication of a complete flora of North America, north of Mexico, in sixteen volumes to be issued in parts. Two barriers however existed which delayed the early progress of the work: both Dr. Britton and the writer were fully employed in other work connected with perfecting the plans of the Botanical Garden, and the enterprise lacked the financial support necessary or at least desirable to ensure entire success. Meanwhile the Spanish War of 1898 changed the political map of North America and plunged us unawares into the midst of tropical

botany. This necessitated a revision of the entire plan of the work, and the completion of many of the vexing preliminary plans for the Garden left us more free to take up again this earlier project. Under the will of Judge Daly we received a large bequest which could be applied to publication, and we are now in a position to proceed with the work. The new plan involves an extensive addition to the previous geographical scope of the work, so that it now includes the West Indies, Mexico and Central America, in all of which regions botanical exploration is being rapidly carried on. This involves an increase in the number of proposed volumes from sixteen to thirty-one. The first two parts which are now nearly ready for the press, will be issued during the present year.

4. Serial Publications. Four series are maintained at the Garden:

- (a) *Journal*. Published monthly, primarily for the benefit of members of the Garden; giving reports of accessions and memoranda relative to the progress of work.
- (b) *Bulletin*. Published at intervals; giving official reports of progress, and often shorter scientific papers by various members of the staff.
- (c) *Contributions*. Consisting of reprints of papers by officers or students of the Garden published elsewhere than in the above series.
- (d) *Memoirs*. Containing more formal and extensive papers by members of the staff. Two volumes have already appeared and a third is in press.

By a grant from the Carnegie Institution of \$8,000 for the first year, a laboratory at Tucson, Arizona, for the study of problems connected with desert vegetations and the economic problems resulting therefrom has been made possible. The entire management is vested in Mr. F. V. Coville, botanist of the Department of Agriculture at Washington, and Dr. D. T. MacDougal, director of the laboratories at the Garden. This new project opens up a line of physiological botany on

an extensive scale and in an entirely new field of research, and thus becomes a prominent side interest for the Garden staff.

The undergraduate work of the Department of Botany of Columbia University is carried on in three somewhat independent sets of laboratories, which in time may be more closely coördinated. (1) The department at Barnard College, originally established as an independent professorship, has been placed, since the death of Dr. Gregory, under the management of Dr. H. M. Richards, with two assistants. (2) At Teachers College, the botanical work is under Professor Francis E. Lloyd, with one botanical assistant. Both Professor Lloyd and Dr. Richards have charge of graduate courses in addition to general or undergraduate work. (3) For the undergraduate work of Columbia College and the Schools of Applied Science, extensive laboratories are fitted up on the third floor of Schermerhorn Hall. A half-year's instruction is given to students in civil engineering and three years' undergraduate work is offered to students of Columbia College. Practically the whole development of the undergraduate laboratories has been accomplished since the removal to the new site in 1897. Laboratories for general morphology and physiology, growing-chambers, dark rooms, lecture room with lantern equipment, and a valuable series of charts and apparatus have been gradually accumulated from a special appropriation at the outset and the usual annual appropriation of the department. In a series of special cases the leading features of the plant system are exhibited in a synoptical way, and a series of preparations in jars illustrate the principal features of plant morphology and the life histories of typical plants; a series of swinging cases are in preparation to illustrate the trees and other woody plants of the North-Eastern States, showing leaves, flowers, fruit, bark and wood. An extensive series of photographic illustrations of various phases of plant communities and types of plant growth form an important educational and decorative adjunct of the halls, supplemented by a series of illustrations from foreign botanical gardens. For the preparation of these

photographs, collections and illustrations the department is indebted to the self-sacrificing and painstaking efforts of Dr. Carlton C. Curtis, who has accomplished this accessory work in the midst of arduous labors in the class room, laboratory and field with the undergraduates of Columbia, and at the same time has been carrying on intricate researches in several problems of plant physiology. The department needs only a special endowment to make its efficiency complete. Besides Dr. Curtis, the department has at present a single assistant.

The publications of the Department of Botany consist of *Memoirs* and *Contributions*, besides miscellaneous publications not included in either series. Two volumes of *Memoirs* in quarto have been published, containing monographs by Dr. John K. Small and Dr. P. A. Rydberg, representing their dissertations for the doctorate. Succeeding volumes of this series will contain a monograph of the North American Ferns by the present writer. The *Contributions* were started in 1886 and have just reached a total of 200 numbers (eight volumes). These consist of reprints of botanical papers published in various periodicals by students of the department or members of the staff.

Miscellaneous publications, not included in the above lists, form some of the most extensive memoirs issued by members of the department. Among these may be noted specially the dissertations of Dr. M. A. Howe on "The Hepaticæ and Anthocerotes of California" (35 plates), of Dr. David Griffiths on "The North American Sordariaceæ" (19 plates), of Dr. Tracy E. Hazen on "The Ulothricaceæ and Chætophoraceæ of the United States" (23 plates), and an important paper by Professor Lloyd on "The Comparative Embryology of the Rubiaceæ" (15 plates). Among other contributions to botanical science emanating from members of the department and soon to be published, we may mention the important discovery of a cytological basis for the Mendelian law by Dr. W. A. Cannon, fellow in botany, 1900-1902, resulting from his study of hybrid cottons, and the economically important

starch investigations of Dr. A. P. Anderson, assistant in botany, 1901-1902, which are destined to revolutionize our present imperfect system of the preparation of starchy foods.

The exact relations between the Department of Botany at Columbia and the New York Botanical Gardens can best be understood by a reading of the original contract between the institutions:

This agreement, made at the City of New York, this eighth day of January, one thousand eight hundred and ninety-six, between the THE NEW YORK BOTANICAL GARDEN, party of the first part, and THE TRUSTEES OF COLUMBIA COLLEGE in the City of New York, party of the second part.

Witnesseth, That THE TRUSTEES OF COLUMBIA COLLEGE have agreed and by these presents do agree to deposit the Herbarium and Botanical Library belonging to the College (except such minor part thereof as it shall deem necessary for undergraduate instruction at the College) with THE NEW YORK BOTANICAL GARDEN, at the request and for the use of said Garden, upon the considerations and for the purposes and subject to the conditions following:

1. That the officers and students of Columbia College may freely consult and use the same as heretofore, as well as the Library and Herbarium collected by the Garden, and that both the Library and Herbarium of the College shall be kept satisfactorily insured by the Garden.

2. That Columbia College, either alone or in coöperation with other institutions, may conduct university courses at the Garden for graduate or advanced students in botany and kindred subjects, which shall be free to their own students, and, as the authorities of the Garden may prescribe, to students at the Garden or from other institutions; that the reasonable use of the laboratories and floral material from the Garden needed for study shall also be available to such officers and students without charge, subject to any necessary regulations by the authorities of the Garden.

3. That all courses of instruction given at the Garden shall likewise be open to the officers and students of Columbia College without charge; and so far as reasonably practicable, botanical material needful for study shall be supplied to Columbia College

for undergraduate work, as well as to other colleges, the public schools and other public educational institutions, subject to the regulations of the Garden authorities.

4. That students studying at the Garden who are not matriculated students of Columbia College or of any other college, may be admitted without charge, on the request of the authorities of the Garden, to such courses at Columbia as said authorities may recommend and the College may approve.

5. That the Columbia Library and Herbarium and all accessions thereto made by the College or in its behalf, while on deposit at the Garden shall be kept distinguishable from the Library and Herbarium of the Garden, by such means as shall be approved by the College, so as to be easily separable in case of removal.

6. That Columbia College reserves the right to retain or to recall at any time so much of its Herbarium and Botanical Library as it may deem necessary for use in undergraduate instruction.

7. That either party may terminate this arrangement on one year's notice to the other.

The Department of Botany is thus placed in direct contact with the largest botanical institution in America, housed in the largest botanical building in the world. Library and herbarium facilities increasing with a rapidity which would have been impossible in a university department; laboratories specially equipped for research; the use of special culture rooms in conservatories; constant temperature rooms for conducting physiological experiments; a chemical laboratory fitted for complete plant analysis; and, best of all, direct contact with a large coterie of specialists each working along a different line of botanical research—these are only a few of the opportunities that can now be offered to graduate students in botany at Columbia University. As guides in their work they may select any of sixteen specialists, each representing different phases of the present multiplex study of plant life.

To one who, only twenty-eight years ago, found the college instruction in botany confined to a two-hour course, extending through a short term of ten weeks, the present tender of the department seems like the realization of an impossible dream.

LUCIEN MARCUS UNDERWOOD

THE PHŒNIX PHYSICAL LABORATORIES

AT the meeting of the Trustees held January 5, 1903, it was determined that as a memorial to the late Stephen Whitney Phoenix the research laboratories of the Department of Physics should be named "Phoenix Physical Laboratories." By this action the first step was taken in a direction which is sure to be of the utmost importance to the study of physics at Columbia, and one which ought to result ultimately in great benefit to physical research work in general. The will of Mr. Phoenix directs that the income of the property coming into the hands of the Trustees from his estate "shall be employed in providing instruments, apparatus and materials for the equipment of special laboratories for study, instruction and original research in physics and chemistry in the said College, and in the publication of the results thereof"; and he explains his purpose as follows: "It is my wish that none of the said property shall be devoted to the elementary laboratories of the said College now in existence, for instruction in qualitative and quantitative analysis and assaying; but that it shall be used to equip additional laboratories with a view of securing to the said College so complete an outfit of apparatus that nothing shall be wanting to enable the instructors and pupils to pursue study and original research in every branch of physics and chemistry. . . . It is my desire that no part of the said property or its income, shall be expended in the payment of salaries."

In case the income exceeds the needs for apparatus, the will permits a portion to be used for "the purchase of books and journals relating to physics and chemistry"; and if a surplus still exist, then, and only then, may any portion be used "in the erection of additional buildings to be used as laboratories."

By this generous and provident act, the late Stephen Whitney Phoenix, of the class of 1859, A.M., LL.B., 1863, has made it possible to develop these two departments in the future

on a scale that has never been attained here or elsewhere. The amount likely to be received by the Trustees from his estate is such that they can safely look forward to the time, in the not distant future, when the Department of Physics may control a sum of not less than ten thousand dollars per annum for research in Physics. By the generosity of the late President Barnard a fund has also been provided which, if restricted to its original purposes, will amply provide all the books and journals needed for the department.

The bequest of Mr. Phoenix has been held subject to life interests of three persons; but one of these has ceased, so that at present about one-third of the amount is available. Already the name "Phoenix Physical Laboratories" is upon the doors of the few rooms of the department which can be devoted to research work exclusively, and a small beginning has been made toward realizing Mr. Phoenix's wish that they should be so equipped as to lack nothing requisite for research work. Whether his implied wish can be realized, that these should become the best laboratories in the world for the study of physics, will depend upon the resources and the good will of the University. There must be further and generous provision for salaries and buildings; for no research fund can come to fruition except under the direction of the best men, and the best men cannot give proper guidance if they are cramped for space or overloaded with teaching and administrative duties. Fortunately the Trustees realize this, and have evinced a desire to develop the department as rapidly as the means of the University will permit.

In the reorganization of the department, several important changes have been made in the staff. Chief among these is the addition of Professor Ernest Fox Nichols, who comes from Dartmouth to take the chair of Experimental Physics. His reputation among physicists is too well established to make it necessary to dwell upon his record. His latest investigations of light pressure are among the most important recent contributions to physical science. Mr. H. C. Parker,

who for several years past has had charge of the work of the engineering students, has received a well merited promotion to an adjunct-professorship, and Mr. Trowbridge and Dr. Tufts have become instructors. Dr. William S. Day, who is transferred from Barnard College, has been appointed lecturer; and Dr. Bergen Davis, at present John Tyndall Fellow and studying with Professor J. J. Thomson at Cambridge, England, will return to the Department as tutor. It is confidently hoped that it will be possible to so arrange the work that all the members of the staff will have at least some time for research work.

The proceeds already available from the Phoenix fund have made it possible to add the following pieces of apparatus to the equipment: a twenty-one foot concave grating spectroscope, of the well-known design of the late Professor Rowland; a standard Michelson research interferometer; two induction coils with attachments; one special Wheatstone bridge; volt- and ammeters; a Hefner standard lamp; two armored galvanometers; a large spectrometer; and additional ordinary galvanometers, bridges, rheostats, etc. It is hoped also that a storage battery may be installed. Connections have been made with the street electric service and hereafter a two-phase three-wire, sixty-cycle, alternating current will be available in the research laboratories. This will not only render it possible to work with this sort of current, but will enable experiments to go on all night and on holidays when the University plant is shut down.

Next to the ever-present need for apparatus, the greatest want of the Department is for more rooms, especially such as can be devoted to individual research; and it will not be permissible to say that the Phoenix Laboratories are well started until the third floor of Fayerweather Hall, now used for other purposes, shall be devoted entirely to its predestined end and reserved for research laboratories.

Although Fayerweather Hall is solidly built and, considering its location, unusually free from jar and vibration, there

are, nevertheless, many investigations which would always be impracticable if the department were confined to this building. It is intended that a small tract of land shall be obtained at some distance from the city, where a simple building will afford all necessary opportunity for such special work as requires freedom from jar and from electrical disturbances. In the meantime, by the courtesy of the Director and the other authorities of the Botanical Garden in Bronx Park, a small stone house has been placed at the disposal of the Department for special work; and as this house is situated far from lines of travel and from trolleys, it will answer the purpose admirably. By its use it will be possible for the department to coöperate with the United States Coast and Geodetic Survey in its magnetic investigations.

WILLIAM HALLOCK

OPPORTUNITIES FOR UNIVERSITY STUDY IN FRANCE

THE student who goes from an American to a French university will note many differences, and the first that will strike him will probably be the total absence, in France, of what is known as the departmental system. The French universities are essentially homes for the higher culture, and every member of their teaching staff is free to choose every year the special subject that will be treated by him within the ground covered by his professorship. He is hindered by no set programme whatever. This is due to the fact that no connection exists between the universities and the establishments of instruction in which students are prepared for the bachelor's degree, *viz.*, the "lycées" and "colleges."

An American who wishes to pursue higher studies in France will therefore act wisely if, as soon as he begins to form his plans, he place himself in communication with the secretary of the university at which he intends to work, or, better still,

with the "Comité de Patronage des Etudiants Etrangers," which he will find established in every important university center, especially in Paris, Lyons, Grenoble, Bordeaux, Nancy, and Besançon. Through these agencies he will learn, sooner than in any other way, what subjects will be treated during the coming semester by every one of the various instructors in the faculties which are likely to attract him most, *viz.*, the faculties of letters and the faculties of sciences.

What is stated above in regard to the absence of set programmes does not apply, of course, to the professional faculties; that is, to the faculties of law and medicine.

As a rule he will find in French universities four different sets of courses. First, the regular courses, conducted by the older staff of the university, whose professorships are established by law; second, complementary courses, given by the junior staff; third, a number of "cours libres," fashioned somewhat upon the model of the courses given in Germany by Privat-Dozenten; fourth, conferences, corresponding to a certain extent to our seminar courses, but having also in certain cases for their object to prepare the candidates for the degrees of "licencié-ès-lettres" or "licencié-ès-sciences," which are the intermediate degrees between the baccalaureate and the doctorate.

It need hardly be said that the richest offer is made by the University of Paris. Let us take Greek, for instance; the classical student will find there, as regular professors, Messrs. Alfred Croiset, dean of the Faculty of Letters, Decharme and Hauvette, Professor Louis Havet, who gives a complementary course on Greek and Latin meter, and Professor Puech, who conducts a series of conferences.

In the work of selecting their courses students are assisted by officers bearing the title of "directeurs d'études." These officers, in the Faculty of Letters of the University of Paris, are Professor Lavissee, for historical studies, Professor Hauvette, for literary and philological studies, and Professor Séailles, for philosophical studies.

The American student will find no cumbrous regulations standing between him and the degrees he may wish to acquire. By applying to the dean of the university in which he wishes to study he will have his American degree recognized, if it come from a university in good standing, and will, with his A.B., be accepted as a candidate for the degrees of "licencié-ès-lettres" or "licencié-ès-sciences," and with his A.M. for the university doctorate, which may be represented by our Ph.D.

There is in the French universities a higher degree, the doctorate in letters or in sciences, which is open only to French citizens holding French lower degrees, and which confers upon the holder the right to teach in French universities. It is seldom acquired before the age of thirty, and is usually applied for by men or women who have already taught for a number of years.

The great attraction of Paris as a university center is due, however, not simply to the strength of its various faculties, but also, and perhaps to a greater extent, to a number of "National Schools," some within, some without the university, the teaching in which has no connection whatever with the preparation for the regular university degrees.

Chief among these schools is the "Ecole Pratique des Hautes Etudes." The teaching is done entirely on the seminar and laboratory plan. It consists of four sections: historical and philological sciences; religious sciences; mathematical sciences; natural sciences. Admission to it is granted, without reference to degree, to any qualified student. It leads to no degree, save that of "élève diplômé." Most of the work of this school is done in the Sorbonne, which is also the home of the faculties of letters and sciences.

Next must be mentioned the "Collège de France." This is one of the oldest educational institutions in the country. Its foundation goes back to the reign of Francis I in the sixteenth century. It has no curriculum, but has courses in nearly every branch of human knowledge, open to all, with-

out any process of registration or the payment of any fee. As a rule each professor gives two hours of instruction a week, one a lecture of rather general interest, the other conducted on the seminar plan. Its last head was Gaston Paris, the illustrious romanist, whose recent death is mourned by the whole world of literature and science.

The other great schools of Paris are more special in character; in most of them admission as auditor is exceedingly easy. They are:

The "Ecole Libre des Sciences Politiques," the scope of which is nearly the same as that of the School of Political Science in Columbia University. It must be mentioned here that the student of political science will find courses interesting him also in the faculty of letters, the law faculty, the "Ecole des Hautes Etudes," the "Collège de France" and the "Conservatoire des Arts et Métiers." The lectures in the "Conservatoire," dealing with most of the subjects of a nature to interest a high-grade skilled mechanic, are given in the evening.

The "Ecole des Chartes," devoted mostly to the study of the middle ages, philology, historical criticism, palæography, archæology, and law.

The "Ecole d'Archéologie" of the Louvre, the teaching in which is based upon the magnificent collections gathered in the Louvre Museum.

The "Ecole des Langues Orientales Vivantes," for the study of Rumanian, Russian, Polish, Arabic, Turkish, Chinese, Japanese, etc.

The "Ecole Coloniale," in which courses will be found in nearly all the languages spoken in French colonies.

The "Ecole des Beaux Arts," not easy of access for foreigners who wish to carry on professional studies in painting, sculpture or architecture, as they must pass a rather severe competitive examination for admission, but with public lectures on archæology, æsthetics, etc.

The "Muséum d'Histoire Naturelle," located on the grounds of the celebrated "Jardin des Plantes," and possessing admirable collections and laboratories, as well as a strong corps of professors and lecturers.

The "Ecole Centrale des Arts et Manufactures," studies in which lead to the degree of engineer.

The "Ecole des Ponts et Chaussées" and the "Ecole des Mines" for more highly specialized engineering studies.

The "Institut Pasteur" for the study of bacteriology.

Finally, there are a few schools intended especially for the formation of servants of the State, closed schools, entrance into which, even as an auditor, is not easy for a foreigner. The most celebrated are the "Ecole Normale Supérieure" for the formation of teachers in the lycées and in the university faculties, and the "Ecole Polytechnique," providing the State with its engineers and artillery officers.

Even this cannot be considered an absolutely complete list. New institutions, semi-private, semi-public are constantly opening, such as the "Collège des Sciences Sociales," and the "Musée Guimet," where courses of lectures on the history of religions are given.

Nothing need be said of the museums; they are too well known to need here more than a general mention.

The chief libraries are the National Library, the library of the University of Paris, the "Bibliothèque de l'Arsenal," "Bibliothèque Mazarine" and "Bibliothèque Sainte Geneviève." Generally they are not lending libraries, but with suitable reference permission to borrow books on special subjects may at times be obtained.

Add to all this the advantage of finding in the theaters a home for the highest forms of dramatic art, of hearing the numberless public lectures given all the year, of attending the sessions of the Senate and the Chamber of Deputies, of listening in the Palais de Justice to the arguments of the greatest lawyers in the country, and of being present at the sessions of the various Academies which together form the

Institute of France, and the unique position of Paris as a home for higher studies will be easily realized.

For plain university work and university life, however, a great deal may be said in favor of residence in some smaller university center, where life is not so costly as in Paris and where the attention of the student is less likely to be diverted towards subjects lying outside of his regular field of investigation. A number of provincial universities possess an individuality of their own, and some of them, especially those of Lyons and Grenoble, have organized special sets of courses for foreign students. In Toulouse and Bordeaux also the American student will find instruction of very high grade and professors who can hardly be called inferior to their Paris colleagues. A stay of some time in one or more of these universities will have moreover the advantage of showing him that, great as is the place of Paris in France, Paris is not the whole of France.

Before concluding, attention must be called to a number of schools—universities in all except the name and the right to confer degrees, which have been organized by the Catholic Church as competitors with the State universities. The most important of these are found in Paris, Lille and Angers. Professor Branly, whose labors are considered by some to have made the invention of wireless telegraphy possible, has his laboratory in the Catholic University at Lille.

The American student whose knowledge of French is not such as to make him feel sure that he will from the start be able to understand lectures delivered in French, will find a number of summer schools where he will be able to improve his French before the beginning of the autumn semester. The most important are those of the Alliance Française in Paris, and of the universities of Grenoble and Bordeaux.

ADOLPHE COHN

THOMAS RANDOLPH PRICE

IN the death of Professor Price the country loses another member of its small group of truly great scholars. As he belonged to the class of the accumulating rather than to that of the producing scholars, Professor Price was probably not so widely known to the general public as some of his contemporaries, or even as some of his pupils; but with his fellow teachers and with thousands besides, throughout the country, his name carried inspiration, just as his memory will command veneration. He stood for scholarship in its broadest and most gracious sense and for the profession of teaching in its most humane and ennobling phases. When applied to him, the trite phrase "the gentleman and the scholar" ceased to be stereotyped.

Doubtless none that knew him failed to wish that he had published more. His students have been accustomed to speak almost in whispers of the vast masses of learning stored in his notebooks, and to wonder when and how he would make them accessible to posterity. Before entering upon his twenty-one years' period of service as Professor of English at Columbia, he had taught Greek, Latin and Hebrew, as well as English, in Virginia for an almost equal period. He had made himself master of six or more modern languages and literatures. He was well read in history and psychology, and a specialist in dramatic criticism. Yet somehow he found time to read the latest novel, poem, or even article of consequence, and frequently to express to the author his enthusiastic commendation. When to the hours thus devoted to accumulation are added those given to his classes and to that administrative work which is becoming such a burden to the teaching staff of our universities, it is no wonder that his name does not stand on the covers of a row of learned volumes.

Yet the regret that an accumulating scholar is not also a producer of books and pamphlets often seems, like many other

human regrets, to be impulsive and vain. The accumulating scholar may be a producer of men, and, what is more, of ideals. This was conspicuously the case with Professor Price. His influence upon successive generations of Columbia men, during the days both of the old College and of the huge metropolitan University, has been very great; and through his pupils, who have in turn become teachers throughout the entire country, it has been largely extended. But this is probably not the most important part of Professor Price's work, since when he came to Columbia the cause of English as a study worthy to rank with Greek and Latin themselves had been practically won. It was in Virginia that Professor Price did the effective fighting for that cause which secured him the call to Columbia. Two years after he went down in defeat as a gallant soldier of the Confederacy, he began, as professor of English in Randolph-Macon College, to urge the absolute necessity of setting the teaching of the vernacular upon a better footing. It was not long before pupils inspired by him were studying English at Leipzig. These men and their successors came back during the seventies and eighties to fill chairs throughout the just recuperating South. In their turn they radiated the influences they had received, not only in their section but in the Middle West, and not only as teachers of English but as teachers of the classics and as heads of colleges. That Professor Price was, more than any other man save his own great and fortunately surviving teacher, Professor Gildersleeve, the source from which this educational renaissance of the New South proceeded was practically demonstrated in the *Sewanee Review* nine years ago by one of Dr. Price's pupils, Professor John B. Henneman.

That this splendid work has not loomed large in comparison with more picturesque and appealing labors in behalf of negro education, or with the growth of material prosperity in the South, is not surprising; yet it has proved a most important factor in promoting the true restoration of the South to the

Union. That even those who know something of the quiet, heroic work for white education in the South should be scarcely aware of Professor Price's share in it is still less surprising in view of the exquisite modesty of the man. He could hardly bring himself to contribute seven meager lines of biography to "Who's Who in America." His ideals of scholarship were so high and his dislike of publicity was so great that a pamphlet or an article was extracted from him with greater difficulty than a series of volumes from some of his fellow scholars. He had not laid to heart the truth of the maxim that it is necessary to cultivate the courage of imperfection, but he had laid to heart the truth of that still finer adage—manners maketh man. The death of such a scholar is a public loss, and it will be the duty of his pupils, as it will doubtless be their pleasure, to make the world fully conscious of the fact by shedding light upon an unobtrusive life of inspiring ideals and of noble, unselfish achievements.

WILLIAM P. TRENT

The following Minute was adopted by the Faculty of the College, the Faculty of Philosophy, and the Division of Modern Languages and Literatures:

Thomas Randolph Price was born in Richmond, Virginia, March 18, 1839, and died in this city, after a brief illness, May 7, 1903. He came of good Virginia stock and inherited the qualities the phrase implies, while adding to them an unusual bent for humane scholarship. After a brilliant career at the University of Virginia, where he came under the special influence of Professor Gildersleeve, he spent three years in Europe, travelling widely and studying at the Universities of Berlin and Kiel. At the outbreak of the Civil War, he ran the blockade, enlisted in the Virginia troops, rose to the rank of captain of engineers, and served the cause of the Confederacy with a loyalty defeat could not diminish. In 1867 he was made Professor of Latin and English at Randolph-Macon College and he held the post for nine

years. During this period he became in many ways an important factor in the upbuilding of the New South. He encouraged the study of the vernacular and inspired numerous pupils, such as the late Professor Baskervill, to continue their investigations in Germany. These men came back to fill college chairs and college presidencies in the South, and their influence in that region is paramount to-day, while it is important also in the Middle West. With the exception of Professor Gildersleeve, no man did more than Professor Price to bring about that educational reform which has contributed so largely to the restoration of the South as an integral part of the Union.

In 1876 Dr. Price succeeded Dr. Gildersleeve in the University of Virginia as Professor of Greek. His influence was increased, nor was his zeal for the study of his native language abated. Meanwhile he was laying broad and deep the foundations of his vast erudition. Besides Latin and Greek and Hebrew, he mastered at least six modern languages and literatures, and yet he found time to read widely upon subjects only remotely connected with his specialties. He became one of the ripest scholars in America, and it is not too much to say that at the time of his death he had few peers in humane learning.

He was called to Columbia in 1882 after the death of Dr. Nairne, who had been Professor of Moral and Intellectual Philosophy and English Literature. His chair was then first established, and he was our first Professor of the English Language and Literature and the head of the department bearing that name. In 1899, at the organization of the larger Department of English, he became, as senior professor, its chairman. In the score of years during which he held his professorship, he saw his department grow until it had seven professors and as many more junior instructors. He saw the College expand and at last organize the University while retaining its own individuality. He took part not only in the graduate and undergraduate work of Columbia but he gave his services also to Barnard College. When the Modern Language Division was organized this year, he was the senior professor of the departments thus united; and there was a unanimous desire that he should be its first chairman—an honor that he appreciated but felt compelled to decline.

His work as a teacher was done with the utmost conscientiousness. Unless prevented by illness, he never omitted a lecture, and he never passed lightly over any part of his prescribed tasks.

Though he found all executive duties irksome, he fulfilled such as were assigned to him, in the course of his long connection with the University, with punctilious accuracy and with unfailing courtesy. He was, whenever possible, invariably present at the stated meetings of the three faculties of which he was a member; and he gave his earnest attention to their deliberations, frequently contributing to the discussion of important questions.

On his arrival in New York he was made welcome, and he speedily lent his aid to the varied activities of the metropolis, as well as to the scholarly societies of national membership. He was promptly chosen a member of the Greek Club. He was a frequent speaker at the meetings of the American Oriental Society. He was one of the leaders of the Southern Society when that was founded. And he served for the usual term as President of the Modern Language Association, delivering a memorable address upon the pressing need of upholding Greek ideals in our more modern instruction.

Dr. Price's culture was cosmopolitan; and the range of his intellectual interest was extraordinarily wide. He had perhaps the broadest equipment of any scholar connected with the University; and he was continually enlarging his outlook. During his two Sabbatical years he added to his stores of knowledge a minute acquaintance with the languages and literatures of Holland and of Scandinavia. His scholarship was both exact and elegant; and his own standard was so lofty that he shrank from frequent publication, withholding even those Shakesperian studies which have been awaited with high anticipation.

His productivity was displayed chiefly in his influence upon his pupils and his friends. He inspired them with his own fine ideals of culture and of conduct, and in these ideals he will live as truly as he could have done in a score of learned volumes. His colleagues and his students will not forget his beautiful sympathy, his kindling enthusiasm, his fine loyalty to all that is best in literature and in life, any sooner than they will forget his impressive erudition. Both as teacher and as man he has become a part of the history and of the traditions of American education, and a multitude of pupils—North, South, and West—look back on him as a figure forever and vitally associated with the moulding of their character, their ideals, and their ambitions.

SHORTENING THE COLLEGE COURSE: THE
CHICAGO CONFERENCE

THE conference held in Chicago, May 8 and 9, under the auspices of Northwestern University, to discuss the relation of the college to the professional school, was attended by representatives of ninety-seven colleges, independent professional schools and universities.* Delegates were present from all parts of the United States. In the main, however, the assembly was composed of representatives of the small colleges of the central section of the country. Several Western universities were represented, but of Eastern universities only Columbia and Columbian sent delegates.

The first session, Friday morning, May 8, was opened by a graceful greeting to the delegates by President James, and by a paper clearly presenting "The present situation" by Professor Young of Northwestern University. The remainder of this session was devoted to enlarging upon the proposition that the American college has a field peculiar to itself. The functions of the college in developing the reasoning powers of the student, in giving him a broad view of history and life, in training him for citizenship, furnished material for addresses from six college presidents: Eaton of Beloit, Dowling of Creighton, Chase of Bates, King of Cornell (Iowa), McClelland of Knox, and Thomas, former president of Oxford College. The ensuing general discussion brought out further remarks in the same vein, but no dissent.

With the second session, Friday afternoon, controversy began. The first question discussed was whether the college course should be reduced in time and in the amount of work required. President Merrill of Colgate University favored the retention of the four-year course, but feared that a reduc-

* Throughout this article the word "university" is used to describe an institution which includes a graduate department and professional schools.

tion to three years was coming. He pleaded earnestly that, in case of such reduction, no attempt should be made to crowd four years' work into three. He deplored the American tendency to hustle and regretted that it should invade the one stage of education where there was still leisure and time for mind and character to ripen—the American college. The paper was a charming apology for the non-strenuous life. President Needham of Columbian University took the opposite position, advocating the accomplishment in three years of the work now spread over four. This was the age, he said, of specialization, and specialization must begin earlier. President Merrifield of the University of North Dakota took middle ground. He explained in detail a plan which has recently been introduced into the collegiate department of the North Dakota University. Under this plan the student who attains mere "pass" marks cannot obtain his degree in less than four years; the student who takes a high average stand ("excellent") in all of his subjects, and honors in some of them, obtains such extra credits for excellence as to complete his course in three years; while the student who has "fair" or "good" marks in the majority of his studies may complete the college course in less than four years but not in three. No student is allowed to gain time by taking more than the regular number of hours (sixteen a week), but only by doing better work than is necessary to pass. President Merrifield's fundamental thought is that, if the college is the place in which the student is trained for active life or for further study, the quantity of information obtained is not so important as the quality of training secured; and that a man who has done three years' work very well is as well trained as a man who has done four years' work passably. In the ensuing discussion, one of the college presidents indicated a readiness to abandon definitely the fourth college year, provided the universities would be satisfied with this concession and would let the Junior year alone. Director Carman of the Lewis Insti-

tute, in defending the four-year course, maintained that the prolongation of the total period of secondary, college and professional instruction was a good thing *per se*, because the evolution of higher types of animal life and the progress of human civilization have been marked always by a steady lengthening of the period of immaturity and adolescence.

The remainder of the second session was occupied by addresses on the question: "What subjects in the typical college course can be accepted by the professional school as qualifying in part for the professional degree, so as to shorten the time required for graduation in the professional school?" This question was discussed, on behalf of the theological schools, by President Southworth of the Meadville school, President Little of the Garrett Biblical Institute and Professor Robertson of the Southern Baptist school; on behalf of the law schools, by Dean Wigmore of Northwestern University; on behalf of the medical schools by Dr. Schauffler of the Kansas City Medical College and by Dr. Edwards of Northwestern University. The remarks of the theological delegates were very instructive, in that they showed the existence of theological courses so widely different in character as to make it clear that the general problem of coördinating college and theological studies is at present insoluble. The main drift of all the addresses was this—that the professional schools would be glad to have part of their work done by the colleges, provided it could be done by men professionally trained and in a way satisfactory to the professional schools. As to the possibility of securing such teaching in the colleges, the medical men were the most, and the legal representatives the least hopeful. It was made clear, however, that the relegation of general scientific studies from the medical schools to the colleges would not permanently shorten the course in medicine; for both the medical speakers declared that at least four years were needed for purely professional work. The ensuing discussion brought out the fact that not

a few of the smaller colleges were endeavoring to prepare their students for advanced standing in professional schools by developing semi-professional or even professional courses.

The first part of the third session on Saturday morning was devoted to a discussion of the "combined course," which shortens the total period of college and professional education by permitting some studies to count for both degrees, and especially to the question whether semi-professional studies should be taken in the college or in the professional school. It may here be noted that the combined course had been incidentally discussed by several speakers on the preceding day. Professor Young had criticized the combined course because it discredited the third and fourth years of the typical college course, and because it was illogical, in that the same degrees, *viz.*, the college and the professional degrees, were given to students who had studied for varying periods of time. President Merrill, on the other hand, had remarked that the insertion of a first year of medical study in the college course did not make that course illiberal. Professor Munroe Smith of Columbia University, in opening the formal discussion of the subject, expanded the point made by President Merrill and maintained that in all our colleges the degree of A.B. was already conferred upon what was substantially a combined course, since the third and fourth college years always included some studies which were pursued in the professional schools also. Without insisting that a uniform solution was desirable, he indicated some of the special advantages which, in his opinion, would result from the general relegation of such studies to the professional schools. He suggested a plan of coöperation between the smaller colleges and the universities, by which the college degree should be given by the college in which the student had pursued his purely collegiate studies, on certificate from the university that he had satisfactorily completed one or two years of professional study. The speaker maintained that coördination of collegiate and professional

studies was necessary and that the prosperity and independence of the smaller colleges could best be secured by voluntary coöperation on their part with the universities.* Dean Good-knight of Lincoln College and other speakers were inclined to favor, as a general principle, arrangements by which the semi-professional work should be done in the colleges rather than in the professional schools.

The remainder of the closing session was devoted to a discussion of the relation of the technical school to the college. Dr. Tyler of the Massachusetts Institute of Technology expressed scepticism regarding the advantages of a college course as a preparation for technical studies. He discussed, however, only the question of a preliminary four-year course in college. He asserted that, after examining the records of numerous college graduates in the institution which he represented, he was inclined to say that four out of ten seemed to derive considerable advantage from their college studies; that three out of ten derived some advantage from those studies; but that to the remaining three the preliminary college course seemed distinctly disadvantageous, either because over-leisurely habits were contracted in the college or because training in the use of the hands was postponed until too late a period. He said further that the superiority of the man of broad culture in professional life was not likely to manifest itself until he had reached the higher walks of his profession; and that it

* In speaking of the tendency which has already manifested itself to secure coördination through subordination, by the so-called "affiliation" of smaller colleges with larger universities, Professor Munroe Smith said that the two processes of educational coördination, *viz.*, coöperation and affiliation, were analogous to the two processes of securing coördination in the economic world, *viz.*, by traffic arrangements and by the organization of trusts. He said that in his opinion traffic arrangements were preferable to trusts both in the educational and in the economic world. This comparison was made the basis for a paragraph which appeared in many newspapers and which attributed to the Columbia representative the extraordinary statement that all the colleges, professional schools and universities of the country were shortly to be combined into one vast educational trust!

was therefore not yet possible to formulate any judgment regarding the ultimate advantage of college training to the chemist, metallurgist, engineer, or architect. Further addresses on the same topic were made by Director Carman of the Lewis Institute and by President Gunsaulus of the Armour Institute.

It was resolved by the conference that a permanent association of American colleges should be established. The appointment of a committee of fifteen was authorized, and this committee was empowered to formulate the conditions of membership in the association and to make arrangements for a meeting in May, 1904. Attempts to obtain a vote of the conference on the proper periods of preliminary, secondary, collegiate and professional education were unsuccessful. This question also was referred for report to the committee of fifteen.

Too much credit can not be given to the Northwestern University authorities for the excellence of all their arrangements, nor can their hospitality be too warmly acknowledged.

MUNROE SMITH

EDITORIAL COMMENT

As our readers are already aware, the study of the problems suggested in the President's first annual report—the correlation of undergraduate and professional work and the possible

The College and the Professional Schools modification of the college curriculum—began with a general inquest, in which the opinions of each professor and adjunct professor were sought and, with very few exceptions, obtained. The results of this inquest were presented in the last number of the *QUARTERLY*. The next step promptly followed: the President submitted to the Faculty of the College questions relating to the length and constitution of the college course and the relation which that course should bear to the professional courses. These questions were at once referred to a committee consisting of

the President, the Dean of the College, and five professors—a committee which includes representatives of the departments of Latin, English, history, psychology, physics, and mathematics. One of the first conclusions reached by this committee, after repeated and prolonged discussion, was that, in dealing with matters affecting so many parts of the University, they needed the aid of the professional faculties and of the University Council. They accordingly requested the Council to obtain from the professional faculties answers to the following questions: Whether any of the subjects taught in the professional schools could with advantage be taught in the College; and what preparatory or preliminary courses were, from the professional point of view, to be desired in the College? At the same time, a question of a more fundamental character was addressed to the Council itself: Whether the degree of bachelor of arts should be conferred only for work done entirely under the direction of the College Faculty, or also for work done partly under the direction of that faculty and partly under the direction of a professional faculty? The University Council, at its April meeting, transmitted to the professional faculties the questions which primarily concerned them, and made the question which was addressed to itself an order for further discussion. In this order was included, on the initiative of the Council, the further question: Whether, if the degree of bachelor of arts should be conferred for work done partly under the direction of the College Faculty and partly under the direction of a professional faculty, the recommendation for such a degree should proceed from the College Faculty, on certificate from the professional faculty, or from the Council, on certificate from both of the faculties concerned? The net result, thus far, is that the College Faculty, the professional faculties, and the University Council have all been drawn into the discussion, and that, before any decision is reached, each of the bodies will at least be heard. It is perhaps in the Council, where all the different interests and points of view are fully and equally represented, that a solution of the problem, or at least a satisfactory working arrangement, is most likely to be discovered.

In spite of the constant progress towards administrative unification which, as was pointed out in a recent number of the QUARTERLY, characterized the presidency of Mr. Low, there has remained a strong centrifugal force, stronger perhaps at Columbia than elsewhere, by reason of our somewhat rigid departmental system and of our close adherence to the principle of seniority. It has sometimes been found difficult to get the departments to work in unison, so that each should supplement the courses of the others—a trouble which our elaborate subdivision into faculties has seemed occasionally to intensify rather than to obviate. This separative principle has even found expression, now and then, in the bestowal of professorial titles which included only a part of the field of work that the bearer of the title might legitimately cover and in fact has been expected to cover. The least measure of “particularism” has, perhaps, existed in the Faculty of Political Science, which has from the beginning been organized and administered as an effective coalition of departments, and is now made one of the new “divisions,” though of course not losing its separate existence as a faculty.

As long ago as 1894, when “departmental circulars” were first issued, there began a *rapprochement* in the form of combinations to publish in one circular all the courses offered by two or more departments whose work was closely correlated. Thus, for instance, joint circulars were issued by the departments of Latin and Greek (“Classical Philology”); of Semitic and Indo-Iranian Languages (“Oriental Languages”); and of Philosophy, Psychology and Education, to which was later added Anthropology. The preparation of joint circulars occasioned informal meetings; and the practical advantages of thus coming together, outside the limits of one department, for fuller, freer and less formal discussion of common topics than could be had in a faculty meeting, soon became apparent. Thus, even before these new arrangements received any legal recognition, much progress was made toward better mutual knowledge and understanding of departmental work and aims.

In launching the “divisional” organization the President

has shown that he hopes to see this principle utilized to the full. It has turned out in most cases—practically in all—that the senior professor of each group of departments forming one division has been chosen to be its chairman. This was but natural; yet it is a practice which need not, in many cases should not, be followed, and which ought not to become a fixed custom. The senior officer, especially when engrossed in research, may often care least of all the staff for the routine details of administration, and these may be safely left to a younger colleague. In this way the interest of the younger members in the divisional work is certain to be increased, and with it that sense of personal responsibility which cannot be developed too early, while each officer of instruction is naturally led to view and discuss the problems most closely affecting his own work under the larger aspect of the work of the division.

What effect the development of the divisional system may have upon the faculties which are divided remains to be discovered. The powers and duties which the statutes vest in the faculties can not legally be exercised by the divisions (as long as the statutes remain unchanged) without the tacit consent of the faculties; and, in a wholly regular order of procedure, they should not be exercised without express delegation. In the life of a university, however, as in the larger world outside, much law is made by custom; and by an unconscious usurpation the divisions may so encroach upon the faculties that the latter shall practically cease to be what they are at present, the legal organization of local self-government in the University. It will then remain to be seen whether the divisions are better fitted than the larger faculties to discharge this function.

Book-collecting is known to have its romances of good and ill fortune, and its detective stories of patient search followed by diplomatic finesse or by resolute action; but we do not commonly look to a university library for plots of such tales. When, however, a university is fortunate enough to have in its service a man who

has the congenital and the acquired capacities which make the successful book-hunter, material for a short story may sometimes be found even in its dusty atmosphere.

A French anarchist who had long resided in London, who was possessed of some means and of inexhaustible energy and patience, and who had devoted himself for years to the collection of anarchistic literature—books, pamphlets, brochures, journals, newspapers and even posters—died last winter. His effects passed into the hands of administrators who apparently knew little of the man or of his life work. His collection of anarchica was turned over to the Sotheby's, the leading London auction house. In one of Sotheby's catalogues, containing a list of illuminated manuscripts and early printed books, Mr. Simkhovitch, of the Columbia library, found an inconspicuous item, advertising a collection of some two thousand anarchistic books, pamphlets, *etc.*—an item which appears to have escaped the notice of European librarians and even of those booksellers who make a specialty of the literature of the political and social sciences. Dr. Canfield at once realized the importance of Mr. Simkhovitch's "find," and, with the assistance of friends of the University, was able to authorize a bid of £50. A cable message soon announced that Columbia had acquired the entire collection for £20. It has since arrived—in twenty-four boxes. It has not yet been fully examined, catalogued and appraised; but, as is indicated in the library notes, printed below, its pecuniary as well as its scientific value is not easily estimable. It includes pamphlets for which European booksellers are asking sums running into four figures of francs or marks, and others which figure in no existing bibliography. The collection has equal interest for students of modern history, of sociology, of penology and of morbid psychology; and it is unquestionably the most complete of its kind, not only in the United States but in the world.

The recent reorganization in the system of control of athletics at Columbia marks, in the evolution of one phase of our

university life, a further stage than has previously been reached. For not less than two years past **Control of Athletics** it has been felt by the various elements concerned in the problem that the condition of things was unsatisfactory. This feeling was most marked in the Faculty Committee itself, whose constant hope it has been that among the students and alumni a public opinion should be developed which would of itself take care of the most vexatious of the questions which customarily arise. In many respects professors are ill-adapted to deal with these questions, both from their official relations with students and because some of the matters involved are beyond their proper sphere. To keep intimate track of certain phases of inter-collegiate sport, a professor must become a quasi-manager of a team, travel with it in its trips and oversee its practice and training. This relation was impossible at Columbia, both because of the demands of professional duties upon the members of the committee and because they were not in sympathy with the plan itself.

On the part of students and graduates, the feeling of dissatisfaction has found not infrequent expression, and on the part of the committee it received definite formulation in a paper by one of its members, Professor Kirchwey, in the December issue of the *QUARTERLY*.* After consultation with all the parties concerned, and in full accord with the committee, President Butler has reorganized matters so that a new committee of five, consisting of three graduates and two students and known as the University Committee on Athletic Sports, will have full control of all questions affecting eligibility other than those of scholarship and physical condition. These latter questions remain of necessity under the control of the director of the gymnasium. The regulations affecting scholarship have been fully discussed by the Faculty Committee and the new committee of graduates and students and, with the approval of the latter body, have been brought before the University Council and adopted in nearly unchanged form. Eligibility cases affected by these rules will

* COLUMBIA UNIVERSITY QUARTERLY, V, pp. 15-23.

be decided in the first instance by the registrar on the basis of his records and, in the event of appeal, will be referred to the dean of the school in which the candidate is registered.

The essence of the rules affecting scholarship is found in the demand that a candidate must not have back work to an amount greater than twenty per cent. of his current registration. This percentage was fixed as a fair working rule for the whole University, composed as it is of diverse schools with varying requirements.

There are two reasonable principles on which scholarship requirements may be based. We may require on the one hand, that a student shall keep along with his class in order to be eligible. To do this, he must, in the College, have less and less back work as he passes from the Freshman to the Senior year. Back work to the extent of fifty per cent. of his registration is allowed in passing from the Freshman class to the Sophomore, while no back work at all is allowable in going from the Junior to the Senior class. In the Law School four hours in fourteen are allowed. Applied Science gives at least twenty-five per cent. leeway, but the interpretation of the rule is stricter. On the other hand, we may establish a single standard which is a fair expression of the general requirements and which is at once just to the work of the University and to the man who desires to play. The latter policy was adopted by the Faculty Committee some years ago, and twenty per cent. was selected as a proper and fair average. A special reason for selecting this percentage was the feeling of the committee that a candidate for an athletic team, with the severe training to which he must conform, ought to be somewhat above the line which separates the student who can go on with his class from the student who drops to the class below.

The full control of matters other than scholarship and physical condition passed, April 18, to the body of graduates and students who make up the University Committee on Athletic Sports. They are F. S. Bangs, College, '78, Chairman; Robert C. Cornell, College '74; Reginald H. Sayre, College '81; E. B. Bruce, Law '04, and D. C. Brace, College '04. The current

rules will be used for the remainder of the academic year; and such revised rules as the new committee may adopt will go into effect July 1.

It is the earnest hope of all concerned in the old arrangement that the new will more satisfactorily meet the situation and will command the support of students and alumni alike. Rules ought to be, and for their satisfactory administration must of necessity be, an expression of the enlightened public opinion of the University body.

Those who were associated with Professor Price in his special field of labor, and are themselves masters of the subjects which he loved and taught, have fitly indicated his services to our University and to the greater university of letters. We others—colleagues and friends to whom the man was nearer than the scholar; who loved him for his gentle dignity, his instinctive courtesy and his unflagging interest in the achievements and aspirations of his friends; who revered in him a standard of conduct, never voiced but always manifest, which made all meannesses seem things remote and incomprehensible—we can say only how large a place he had come to fill in our lives, and how much larger the place seems now that it is empty.

In Memoriam

THE UNIVERSITY

The meeting of the Historical Association of the Middle States, in March, and the conventions of the American Mathematical and Physical societies, in April, brought to Columbia many distinguished scientific visitors, representing nearly every important university and city in the East. Throughout the spring Columbia extended its hospitality to other guests, younger and as yet undistinguished, but not less cordially welcomed. Students driven from Ithaca by a typhoid fever epidemic applied for opportunity to complete their courses of study or to keep up with the work of their classes, and all such

requests were promptly granted. President Butler said that the situation of these students resembled that of members of a club, temporarily without a home of their own; and he directed that every possible courtesy should be extended to them. In accordance with his instructions, sixteen Cornell students, who wished to remain at Columbia for a few weeks only, were enrolled as auditors and treated as guests of the University. Six others matriculated as regular students for the session, four in the College and two in Applied Science.

* * *

The committee appointed in November to consider and report "what celebration, if any, should be held on the one hundred and fiftieth anniversary of the foundation of the corporation" (which will occur on Monday, October 31, 1904), submitted to the University Council, February 17, a unanimous recommendation that this anniversary should be suitably commemorated and that the celebration should be strictly academic in character. The committee further outlined a tentative plan of celebration. On Tuesday, Wednesday, Thursday and Friday, October 25, 26, 27 and 28, a series of colloquies, conferences or lectures will be delivered at the University before the officers, advanced students, and such scholars from other institutions as may accept invitations to be present, by a small number of the most eminent scholars, European and American, selected to represent the different fields of activity in which the University is at present engaged. For the evenings of those days no official functions will be arranged, the time being left free for private entertainment of the invited guests and for informal social intercourse. Saturday, October 29, will be reserved for such celebration as may be planned by the students of the University. On Sunday, October 30, a religious service of praise and thanksgiving will be held at the University, with appropriate music and a sermon by a distinguished preacher. On Monday, October 31, the concluding exercises will take place. These will include an address, in part historical in character, by the President of the University; and there will be a luncheon and reception given for the guests of the University.

This report was accepted by the Council, and the recommendations of the committee were transmitted to the Committee on Education of the Board of Trustees. On March 2, this committee submitted a report approving the plan of celebration outlined by the Council Committee. The Trustees accepted the report, and made provision for the appointment of a committee to take full charge of the arrangements for the celebration. This committee consists of the Chairman and the Clerk of the Board, the President of the University and Professors Van Amringe, Peck, Munroe Smith and R. S. Woodward.

* * *

In the thinning ranks of those older teachers who, in their long term of service, have done so much to form the Columbia of to-day, there is another vacant place. Professor Price died suddenly, May 7. The funeral services were held at Trinity Church, May 10, and were attended by the Trustees, the Council, and the majority of the professors, by many alumni and students, and by nearly all the prominent Southern men in New York. The members of the English Department acted as pall-bearers.

The academic year now closing has been marked by many changes in the teaching force. The faculties of the University proper have lost, by death, two of their members and, by resignations, six others: Professors Hyslop, Keener, Peabody, Tuttle and Weir* and Adjunct Professor Cathcart. On the other hand these faculties gain fourteen members: five by first appointment, Professors Herter, Nichols, Saville, Scott and Adjunct Professor Meylan; and nine by promotion, Professors Holt and Strong and Adjunct Professors Calkins, Keyser, Mayer, Parker, Richards, Stone and Woolson. Adjunct Professors Farrand and McCrea have been promoted to full professorships. The net result of these changes is that the total number of professors is increased by one, and the number of adjunct professors by five.

Other resignations, not of seats in any faculty but of positions of professorial rank, are those of Dr. Chittenden from

* Dr. Weir remains connected with the School of Medicine as clinical professor.

the School of Medicine and of Dr. Savage from the gymnasium.

Barnard College has for the first time admitted a woman (other than its dean) to its faculty, by the promotion of Dr. Maltby to an adjunct professorship. Teachers College Faculty gains four members: one by appointment, Director Sykes; and three by promotion, Adjunct Professors Bagster-Collins, Bigelow and Rouillion. Mrs. Woolman, of the same faculty, is promoted from an adjunct to a full professorship.

In the annual appointment class, the changes can be only summarized. Against 122 reappointments and 11 promotions, there have been 35 first appointments.

* * *

The total cost of maintaining the educational work of Columbia University for the year 1903-04 will be nearly one and three-quarter millions of dollars, this being the amount appropriated in the budgets for next year as prepared by President Butler and the several committees on finance and now adopted by the Trustees of Columbia College, of Teachers College and of Barnard College, respectively.

The budget of Columbia University proper for maintenance alone amounts to \$1,270,394.80. Of this amount, \$1,041,848 has been appropriated for educational administration and instruction, for care of the buildings and grounds, for the library, and for the cost of the business administration of the corporation. The appropriation for interest on the debt is \$136,726.80, and that for taxes and other charges (exclusive of interest) upon the property at Williamsbridge, the 16th Street and Loubat properties, and annuities, is \$91,820.

The general income of the corporation available to meet these expenditures is \$903,590. To this must be added the income of trust funds applicable to the expenses of next year (\$63,047), the amount promised in gifts (\$21,700), and the amount paid by the Trustees of Barnard College toward the salaries of officers of instruction (\$59,550), making a total of \$1,047,887. Adding the income from other sources, it appears that the deficit of the University corporation proper for 1903-04, to be met either by special gifts or by borrowing, will be \$102,-

322.88. The net gain for the year 1903-04, as compared with the conditions of the corporation during 1902-03, is estimated by the Finance Committee at \$52,468, the deficit for the current year having amounted to \$154,790.88.

The budget of Teachers College, including interest payable, amounts to \$330,065, and the budget of Barnard College to \$104,367. The estimated deficit of Teachers College is \$33,429, and that of Barnard College \$10,357. The total deficit, therefore, will fall not very far short of \$150,000, unless large sums are provided to assist the Trustees in maintaining their work.

RELIGIOUS INTERESTS

Young Men's Christian Association.—Under the leadership of Marcellus Hartley Dodge and his co-laborers, this organization has greatly extended its influence and its usefulness. Its fourfold object—to unite the Christian men of the University and deepen their spiritual lives, to win others to Christian service and unite them in this brotherhood, to train them for service in religious and philanthropic work, and to advance in every possible way the best interests of the University—has been more nearly reached this year than at any previous time. In the Association nearly two hundred church members have been brought together, and with these nearly one hundred men of good moral character, who are in sympathy with the Association, have joined themselves. An effort has been made to deepen the spiritual lives of the students by a devotional study of the Bible and by work in mission fields. Over one hundred men have been engaged in the former and some ten or fifteen in the latter. Besides these Bible classes, a praise service has been held on Sunday afternoons, at which some member of the faculty or outside speaker has dealt with the vital side of student life. Men have been trained for religious and philanthropic activity by work in the various classes, as members or leaders, or by the responsibility of committee work, or by spending an evening or two a week as leaders of Boys' Club and Settlement work. Over two hundred and fifty Columbia students are now more or less interested in work of this character.

Other lines of activity are indicated by the facts that, at the beginning of the academic year, 1,200 handbooks, containing much information of value to the students, were distributed, and 500 students were aided in securing lodgings or board. Twenty colleges, universities and associations have been supplied with speakers for various meetings. At the Northfield Conference Columbia was represented by forty students, more than twice as many as had attended any previous convention.

The Treasurer's Report for the year 1902-03 shows receipts amounting to \$1,148.52 and an unexpended balance of \$18.93.

The following officers have been elected for the coming year: President, Marcellus Hartley Dodge, '03 College; Vice-Presidents, James Meyers, '04 College, H. S. F. Randolph, '05 Architecture, and Clarence D. Kerr, '04 Law; Treasurer, James A. Taylor, '05 College. For the College branch, the officers are: President, James Meyers, '04; Treasurer, E. B. Lyford, '04; Secretary, R. K. R. Goodlatte, '06. For Applied Science: President, H. S. F. Randolph, '05; Treasurer, Milton Cornell, '05; Secretary, A. C. Scott, '05. For Law: President, Clarence D. Kerr, '04; Treasurer, N. K. Cone, '04; Secretary, F. H. Sincerbeaux, '05.

Plans have been made for more extended work in 1903-04. Seven of the officers and members spent three days at Harvard, in April, attending a conference of presidents and general secretaries, and studying the various problems and methods of meeting such problems in the various universities. A determined effort will be put forth greatly to increase the number of courses in Bible study and to interest a large number of men in world-wide missions. New fields for settlement work will be opened and higher efficiency is expected.

The University authorities, believing that the influence exerted by the Association tent at Camp Columbia last year was good, have asked the Christian Association to provide a building for its work in the Camp. The sum of \$2,500 has been asked for, to erect a building which shall contain a reception room, a reading room, a writing room, a Secretary's office and bedroom, and an assembly room which will seat one hundred and twenty-five students. With this equipment, the associa-

tion could well provide for the social and religious side of the camp life. \$2,000 have already been guaranteed, and an effort will be made among the faculty and students of Applied Science to raise the remaining \$500. Mr. Howard Richards, Jr., who is to succeed J. C. McCracken as Secretary of Earl Hall, will be at Camp Columbia this year and act as secretary of the new building. This will insure the very best management of the enterprise.

Barnard Christian Association.—The work of the Barnard Association is carried on largely through committees, and a general survey may most easily be taken by considering in some detail the work of these committees.

The Devotional and Bible Study committees have charge of all religious meetings held under the auspices of the Association. During the past year short weekly prayer meetings have for the first time been held, and the attendance, though small, has been encouraging. Four Bible classes have been conducted with courses adapted to the four college classes. During the past year the following courses have been given: The Life of Christ, The Pauline Epistles, The four Gospels, and Old Testament characters. Nineteen students have been enrolled in these classes during the past year. The Philanthropic Committee, in coöperation with the College Settlement association, collected money and provisions at Thanksgiving and Christmas for the Hartley House Settlement. At Christmas, also, gifts for children were sent to this and to the Rivington Street settlements. Books and magazines were also collected and sent, through the International Committee of Y. M. C. A., to the soldiers in the Philippines. Under the auspices of the Missionary Committee, two meetings were held at which addresses were made by Miss West of Japan, and by the Hon. Miss Kinnaird of London. A mission class has also met weekly since January for the study and discussion of topics connected with present day mission fields and workers. The Music Committee has charge of the singing at chapel. The main work of this committee during the past year has been the reorganization of the chapel choir. The services of Dr. Warren, choirmaster and organist of St. Bartholomew's

church, were secured, and under his leadership the choir has improved greatly in efficiency and in numbers. The Reception Committee takes charge of the social activities of the Association. Besides special receptions, there has been an informal reception to all members of the College every Monday afternoon in the parlors at Earl Hall. Through a special committee, formed for the purpose, three hundred handbooks of the College and surroundings were distributed to students.

The Association sent representatives to two student conferences during the past year. Fifteen delegates attended the conference at Silver Bay, Lake George, last summer, and one delegate was sent to the Biennial Convention of the American Committee at Wilkesbarre, Pennsylvania. On the evening of Thursday, April 30, a concert was given by the choir of St. Bartholomew's church for the benefit of the Association. The funds thus raised will be used for paying the expenses of delegates to the Silver Bay Conference this coming summer.

The Association now numbers sixty-three members. Though the work done during the past year is in many ways far below what was expected, it nevertheless shows an advance over former years, and promises well for the future.

The Phillips Brooks Guild of Teachers College is carrying on three distinct lines of work, the Girls' Clubs at the Speyer School, the Sunday-school classes at the Sheltering Arms Orphan Asylum and the social and religious work within the College.

At the Speyer School fifteen young women have charge of clubs and classes for working girls. These clubs meet on Monday and Wednesday evenings and have about sixty members. The younger girls, called the Priscilla Club, have classes in gymnastics and sewing. The older girls, called the Ellen Speyer Club, have classes in gymnastics, home nursing and dressmaking. This work was started in February and has grown steadily. It is hoped to add several other classes and extend the usefulness of the work during the coming year.

Sixteen members of the Guild teach Sunday-school classes at the Sheltering Arms, and every Sunday evening three young ladies spend an hour in singing hymns with the children.

In an institution, such as Teachers College, where every individual is doing highly specialized work, an organization like the Guild renders invaluable service in furnishing a common interest and a common meeting place, and those students who have attended the Thursday afternoon teas at Earl Hall have felt the advantage and help of meeting others who were earnestly working along different lines but with the same aim.

The religious life, which is the mainspring of the varied activities of the Guild is provided for by Bible classes held at Whittier Hall, by chapel services every day at noon, conducted by some member of the faculty and by church notices posted each week and giving information regarding church services.

The Guild has been an instrument which has added much to the life of Teachers College in the past, and it is hoped that in the future it will do still more efficient service.

THE LIBRARY

During the winter many valuable acquisitions have been made by the Library. Several important sets have been secured, for which for many years there has been constant and growing demand. Among these, and of fundamental significance, is the last edition of the complete works of Albertus Magnus, in thirty-eight quarto volumes. This great encyclopedia of the middle ages is of special value not only to the Departments of Philosophy and History but also to those literary departments which have students working on the literature of the early Renaissance. Of almost equal importance is the last edition (the Vives edition, 1891) of the complete works of Duns Scotus, in twenty-six quartos. The acquisition of this work fills a large gap in the philosophical library. Worthy of note also are the works of Bellarminus (the edition of 1721), of Thomas Campanella (the original editions of 1617-1623), and of Dominico Soto (the editions of 1568-1608).

The Library has also completed some very important sets of periodicals: such as the *Revue Critique de la Legislation et de Jurisprudence*, vols. 1-43; *Blätter für das Bayerische Gymna-*

sialwesen, vols. 1-34; *La Revue Blanche*, vols. 1-50; *Horological Journal*, vols. 1-30; *Bibliographie Catholique*, vols. 1-76; *La Quinzaine*, vols. 1-42; *Die Arbeiter-Versorgung*, vols. 1-7; *Neue Jahrbücher der Geschichte und Politik*, vols. 1-14.

The University rules against the purchase of rare and costly books and manuscripts, its funds being scarcely sufficient to meet the immediate and pressing demands of the rapidly growing departments. But occasionally the Library is tempted beyond its strength to resist. This winter it has bought an interesting Æthiopic manuscript of the fourteenth century; the first edition of John Bunyan's last work, "The Acceptable Sacrifice" (London, 1688); the first editions of certain works of Corneille, Jonathan Edwards, Giordano Bruno, Adam Smith, Richard Steele, James Thomson, Goethe, Schiller, Kant, Lessing, Fichte, John Barclay, Aelianus, Polydorus Vergilius; and a complete set of Ulines Aldrovandus's early biological works. A large number of choice and important editions of Horace have been secured; the Chartist movement has been well covered by the purchase of many tracts and pamphlets; and there has been added to the already valuable collection of manuscripts a rare Latin Bible, of the thirteenth century, on finest vellum—in perfect preservation.

By exchange with the New York Public Library, several thousand valuable foreign State documents have been secured.

Mr. and Mrs. Avery have again been mindful of the interests of their Library and have added Blondel, "Architecture Française," 1752, four volumes, folio; "Mobilier Royal Français," two volumes, folio; "Treasures and Masterpieces of Art at the Paris Exposition," two folio volumes; the illustrated catalogue of the collection of Henry Marquand; "Le Monographie de l'Eglise Notre Dame d'Amiens," and other books of equal value.

A most interesting acquisition is a remarkably complete collection of anarchistic books, journals, newspapers, pamphlets, manuscripts, posters, photographs, songs, etc., originally published in all parts of the world and in something like fifteen languages. Anarchistic publications are seldom issued in a regular way, and are often unobtainable even a very short

time after they appear. Complete sets of these periodicals and publications are generally regarded by dealers as unique and command high prices. In March, however, one of the most complete collections of such material, including almost everything published by anarchists of all sorts and conditions from 1869 to date, was offered in London and secured by this library. It is difficult to describe this collection both adequately and briefly. There are 252 sets of newspapers and periodicals, nine-tenths of which are absolutely complete. There are about 260 anarchistic books and pamphlets, a collection of 270 large anarchistic sheet posters (the majority of which are very rare indeed), a very large collection of autograph letters and autograph manuscripts by most of the leading anarchists from Bakounin down, and extensive collections of photographs and of songs and of cuttings from non-anarchistic newspapers. As a whole this collection is probably the largest and most complete in existence, and offers excellent and interesting material for scholarly and patient investigation.

Through the kindness of Mr. Avery a large and illustrative collection of old and modern artistic bindings has been put on exhibition in Room 307, and will probably be continued during the month of May. A more detailed description of this will be given hereafter.

During the winter the large and valuable collection of Columbiana, collected and cared for by Mr. John B. Pine, the clerk of the Trustees, has been carefully catalogued, the cards being distributed through the card catalogue of Columbiana already in the Library. As soon as space can be found, all Columbiana will be placed in one room, properly displayed, under a competent custodian, with every opportunity for examination and investigation. This is only one of the many directions in which advances and improvements will be made as soon as new buildings are erected to provide for the lecture-work and class-work now carried on in the library building.

The members of the graduating class of the State Library School at Albany, some fifty strong, visited the University early in April, lunching with the librarian and members of his

staff, and spending the greater part of the afternoon in a careful examination of the methods prevailing and forms in use in this library.

The librarian recently spent a full day at the library of the University of Pennsylvania, at the request of its Trustees Committee, making a careful examination of the work of all departments, and conferring with the librarian and members of his staff and with the Trustees Committee at the close of the day. Later Miss Prescott, the supervisor of the department of cataloguing and classification in this Library, spent a day at the library of Philadelphia—with great pleasure and profit. Still later the librarian sent Mr. Frederick Erb, so long supervisor of the loan division of the readers' department of this library, on a tour of investigation which covered the library of Yale University, the Public Library of New Haven, the library of Brown University, the Public Library of Providence, the library of Harvard University, the Public Library of Boston, and the Boston Athenæum. The librarian of the University of Pennsylvania has sent a member of his staff to spend a day at Columbia, and the librarians of Harvard University and the University of Syracuse have done the same. Visits to the Library have also been made, for the purpose of investigation and comparison of plans, *etc.*, and for conference with the librarian, by the architects of the new library for the State University of California, the new library for the University of Chicago, the new Carnegie Library at Columbus, Ohio, and several other minor college or public libraries. Columbia University is so fortunate in both its Library and in its Department of Architecture as to be a sort of Mecca for all who are studying carefully the best conditions of library housing and administration.

FACULTY OF PHILOSOPHY

Division of Classical Philology.—At a meeting held on February 3, 1903, the Division of Classical Philology was formally organized. The officers of the division are a chairman and secretary "to be elected at the last stated meeting of the academic year and to serve for the period of one year, begin-

ning with the date of their election." The stated meetings of the division are to be held during the first week of the months of October, December, February, April and June. As officers of the division, to serve until June, 1903, were elected: Professor Peck, chairman, and Professor Earle, secretary. The division has held since the above date two special meetings and one stated meeting.

Department of Latin.—Professor James C. Egbert has been appointed Professor of Latin in the American School of Classical Studies in Rome for the year 1903-1904. He has been granted a year's leave of absence by the Trustees and will spend the winter in Rome, leaving New York in August after the close of the summer session. This appointment is peculiarly appropriate as Professor Egbert has paid so much attention to epigraphy and palæography, subjects to which students of the School of Rome devote much of their time.

Department of Comparative Literature.—Three additional volumes of the Columbia University Studies in Comparative Literature will appear this spring: "Platonism in English poetry in the sixteenth and seventeenth centuries," by John Smith Harrison; "The English heroic play," by Lewis Nathaniel Chase; and "Irish life in Irish fiction," by Horatio Sheafe Krans.

Department of English.—Harold S. Symmes, University of California, 1899, Ph.D. (*summa cum laude*), University of Paris, 1903, has been appointed tutor in English. Dr. Symmes is to have special charge of the research work of first-year graduate students. "A study of the Elizabethan lyric," the doctoral dissertation of John Erskine, Proudfit Fellow in Letters, 1900-03, will appear as volume second of the departmental Studies in English.

Department of Germanic Languages and Literatures.—The registration of students for the year now closing is 638; last year it was 525. Of this year's registration 529 are undergraduates, 109 graduates. Of the undergraduates 291 are men, 238 women. These figures have not been made to include students of German registered at the last summer session, nor those pursuing extension courses in Teachers College. If

these two classes of students are added, the grand total is 778, as against 638 for last year.

About April 1 Professor W. H. Carpenter was suddenly compelled, by the recurrence of bronchial affection from which he has occasionally suffered in past years, to drop all his university work and devote himself to the recovery of his health. Arrangements were made by his colleagues of the department for the continuation of his more important courses, but his absence was keenly felt. At this writing, it is a pleasure to state, the reports from him are of an encouraging character.

The Deutscher Verein continues to perform admirably the functions for which it was created. Its fortnightly meetings have been uniformly well attended, and several interesting addresses have been given during the past quarter. Among these we mention particularly those of Professor Kuno Francke upon "*Das germanische Museum in Cambridge*," and that of Mr. W. E. C. Leonard, Fellow in English, upon "*Der Kronprinz in Bonn*."

The German work of the summer session of 1903 will include two new courses—a longer elementary course, and an advanced course, to be given by Dr. Rudolf Tombo, Jr., on the history of the German language. This last will be of the same general character as Professor W. H. Carpenter's Course 9, and may be counted toward the higher degrees.

During the months of February and March Professor Thomas gave at the Educational Alliance, a course of six lectures on Henrik Ibsen. On March 12 Dr. Remy took part in the Klopstock celebration of the Gesellig-Wissenschaftlicher Verein by reading a paper on "*Klopstock als vaterländischer Dichter*." On April 29 he read a paper on the Siegfriedsage before the Phi Beta Kappa of the City College.

The coming year will show the following changes in the teaching corps of the department. Professor Bagster-Collins, of Teachers College, who has been absent on leave, will again be on duty. Mr. Braun, tutor in Barnard College, has received leave of absence for a year, and his place will be taken by Mr. Heuser, with the title of lecturer. Miss Annina Periam, Uni-

versity Fellow in 1901-2, and at present studying in Leipzig, has been appointed assistant in Barnard College. Mr. J. L. Kind, at present Carl Schurz Fellow, will be assistant in Teachers College. Mr. Philipp Seiberth, at present an instructor in Harvard, will be assistant in Columbia College.

Department of Indo-Iranian Languages.—Professor Jackson started for Persia early in February and arrived at Tiflis in the Trans-Caucasus on March 9. After several months of travel and research in Persia, he will return in time to take up his courses on Shakspeare and Chaucer in the summer session. During his absence Professor Jackson's work is being carried on by Dr. Louis H. Gray, with the exception of a two-hour course in the Old Persian cuneiform inscriptions, which is being given by Dr. Yohannan. The concluding portion of Professor Jackson's treatise on the "Religion of the Avesta" (in the "Grundriss der Iranischen Philologie") is now in the hands of the printers and is expected to appear before the end of the year.

Department of Romance Languages and Literatures.—The courses in Romance philology have been completely reorganized. The minor headings, Provençal, Portuguese and Rumanian disappear, and the courses which they covered, as well as all the other courses, whether in French, Spanish or Italian, likely to be taken only by the students of Romance philology, will appear under that heading. There will thus be, in addition to the seminar, no less than thirteen courses in Romance philology. Of these courses four are new: Dr. Nitze's "Rise and development of the Roman d'Aventure" and "Arthurian romance in France"; Mr. FitzGerald's "Oldest monuments of the Spanish language"; and Dr. Holbrook's "Early Italian literature." For the two seminars, that in Romance philology, conducted by Professor Todd, and that in Romance literature conducted by Professor Cohn, the subjects are, respectively, "Contributions to a dictionary of Old-French locutions" and "The life of Voltaire." It is the intention of Professor Cohn to devote the labor of his Seminar for several years to a thorough study of Voltaire.

Department of Philosophy and Psychology.—Dr. R. S. Woodworth has been appointed instructor in psychology and will assume the work hitherto carried on by Dr. Farrand, now professor of anthropology. Dr. Woodworth received the degree of doctor of philosophy from Columbia University in 1899. He is at present lecturer on physiology in University College, Liverpool. William Pepperill Montague, Ph.D. (Harvard), now instructor in philosophy in the University of California, has been appointed lecturer in philosophy.

Several new courses in philosophy are announced for next year: "Logic and metaphysics," by Professor Woodbridge; "Post-Kantian idealism," by Dr. Sheldon; "The philosophy of realism," "The philosophy of Leibniz," and "Theoretical ethics," by Dr. Montague; and a course on "The fundamental problems of philosophy." This last course will consist of a series of lectures on the basal problems of philosophy by invited lecturers from other universities and by the officers of the department. Professor Adler's course in "Political and social ethics" will be enlarged. For the first half-year there will be a series of lectures by appointed lecturers on the following subjects: "The ethical content of the great religions," "The theory of the relations of Church and State," "The relation of ethics to law," and "The relation of ethics to the physical sciences." The names of the lecturers will be announced later. In the second half-year the lectures will be by Professor Adler. Seminars are announced in Aristotle, political and social ethics, comparative logic, and Schopenhauer.

There has been published recently in the Columbia University Contributions to Philosophy, Psychology, and Education, "Heredity, correlation, and sex differences in school ability," by Professor Thorndike and "The practice curve: A study in the formation of motor habits," by J. H. Bair. A new edition of Professor Thorndike's "Notes on child study" is in press, together with the following: "College admission requirements during the nineteenth century," by Edwin C. Broome, Ph.D., superintendent of schools of Rahway, N. J., "The training of secondary teachers in the United States,"

by G. W. A. Luckey, Ph.D., professor of education in the University of Nebraska, "The perception of number," by J. F. Messenger, instructor in psychology in the Pratt Institute, Brooklyn; "A study of memory for connected trains of thought," by E. N. Henderson, Adelphi College, Brooklyn, and "Rhythms, visual, motor and applied," by J. B. Miner, fellow in psychology.

The presidential addresses given by Professor Cattell before the American Society of Naturalists in convocation week and before the New York Academy of Science in December have been printed in *Science*. A Phi Beta Kappa address read at the John Hopkins University and an address before the Philosophical Club of Yale University have been printed in the *Popular Science Monthly*. Professor Cattell contributed an experimental research on the time of perception as a measure of differences in the intensity of sensation to the "Festschrift" in honor of the seventieth birthday of Professor Wilhelm Wundt. As Professor Wundt's first assistant in psychology at Leipzig Professor Cattell was asked to present the volumes.

The Western Philosophical Association held its annual meeting at the University of Iowa, April 10-11. The subject of the presidential address, by Professor Woodbridge, was "The problem of metaphysics."

FACULTY OF POLITICAL SCIENCE

Department of History.—The attendance on courses given by the department during the year 1902-03 passed the high-water mark of 1,000, there being a total registration of 1,105 exclusive of the 26 who take the course on methods of teaching history given in Teachers College. Within the year nineteen candidates have complied with the requirements of the department for the degree of Ph.D., either in whole or in part; and nine have met the full requirements. According to the best statistics ascertainable, this places Columbia definitely in the lead in graduate history work.

During the past year Dr. Garner and Mr. Fleming supplied the place of Dr. Shepherd, who was absent on leave. Dr.

Garner took the entire work of History A at Columbia, and Mr. Fleming the modern European, English and American history which was to have been conducted in part by Dr. Sill. The success of both Dr. Garner and Mr. Fleming was very gratifying to the department. Dr. Botsford's work with the classes in ancient history has proved a noteworthy addition to the efficiency of the department as a whole.

Professor Robinson's absence on leave during the last half of the year left his work to be divided between Miss Davison, who delivered the lecture course on mediæval history at Barnard College, and Dr. Shotwell, who conducted the seminar and the lecture work at Columbia. Professor Robinson is taking his sabbatical year in Japan and the Orient. On his way he delivered a series of six lectures at the University of Wisconsin on the history of culture in the middle ages. He also addressed audiences at Leland Stanford Jr. University and in San Francisco.

At the meetings of the History Club papers were read by Dr. William Garrott Brown of Harvard University, on "The United States at the assassination of Lincoln"; by Professor Edward G. Bourne of Yale University, on "Travel as a source of history"; by Professor John W. Burgess, on "Political science and history," and by Professor Charles W. Andrews of Bryn Mawr College, on "The settlement of the Carolinas." The student members of the club presented reports on their investigation of original authorities, and reviews of current historical literature.

The students and instructors in history have organized a society for the purpose of informal discussion of such questions as may arise in connection with graduate work in the department. It also aims to afford an opportunity of social intercourse, which is in general somewhat lacking in the life of graduate students. Two meetings have been held: the first in March, when it was decided by the students to put the society on a permanent basis, and one in April, which was called especially to bid good-bye to Professor Sloane, who is leaving for his sabbatical year.

One of the graduate students, Miss S. M. Kingsbury, has won the travelling fellowship offered by the Woman's Education Association of Boston. The conditions of competition for this fellowship are the same as those prescribed by the Association of Col-

legiate Alumnæ, and it is awarded by the latter. Miss Kingsbury will spend the year in London, Rome and Athens.

Departments of Public Law and Comparative Jurisprudence.—The number of students primarily registered in the School of Law who attend courses under the Faculty of Political Science, chiefly in public law and jurisprudence, continues to increase. In 1899-1900, the number was 76; in 1900-01, 127; in 1901-02, 250; in 1902-03, 320.

Upon the foundation provided by the testament of Dorman B. Eaton the Trustees have established an Eaton Professorship of Administrative Law and Municipal Science. They have at the same time abolished the professorship of administrative law heretofore held by Dr. Goodnow, and have made him first occupant of the new chair. Professor Goodnow has undertaken to write a book on municipal government, which is to form one volume of a series entitled "The American State," to be edited by W. W. Willoughby and to be published by the Century Company. Professor J. B. Moore has nearly completed his "International Law Digest" (which is not a revision of Wharton's Digest but a new work), and the first four chapters are already in press. Professor Moore delivered an address on "The application of the principle of arbitration on the American continents" before the Academy of Political and Social Science in Philadelphia, April 17.

Department of Economics and Social Science.—Professor Seligman delivered an address on "The valuation of franchises" at the national convention upon municipal operation and public franchises, held in New York, February 25-27. His recent book on "The economic interpretation of history" is being translated into Italian and will be published in Italy this summer. Professor Clark debated with Mr. Louis Post the question of the single tax before a large audience at Cooper Union, in March. He will lecture during the summer, at Chicago University and at the University of Wisconsin, on "The theory of economic progress." Professor Seager's "Elements of economics" will be published early in the autumn. Dr. Johnson's monograph on "Rent in modern economic theory" has been published by the American Economic Association.

FACULTY OF PURE SCIENCE

Department of Anatomy.—Dr. Rolfe Floyd retires at the close of the year from the position of assistant demonstrator of anatomy. Dr. William Darrach has been appointed by the Trustees to fill the vacancy thus created. In view of the valuable services rendered by Dr. Floyd during his term of office, he has been named as lecturer in anatomy and will continue to deliver the course of lectures on "Variation and heredity" instituted during the present academic year.—The sixteenth annual session of the Association of American Anatomists, held during convocation week in Washington, D. C., was attended by Professor Huntington, president of the association, and Dr. E. A. Spitzka, alumni association fellow in anatomy. Dr. Huntington presented a paper on "The derivation and significance of certain supernumerary muscles of the pectoral region," and Dr. Spitzka one on "The anatomy of the human *tusulæ*, in its relations to the speech centers, according to race and individuality." Professor Huntington's book on "The anatomy of the peritoneum and abdominal cavity" appeared from the press of Lea Bros. and Co. in January.

Important accessions to the phylogenetic and variational series of the museum of human and comparative anatomy have been obtained during the present session. The new acquisitions comprise an especially valuable group of preparations of the muscular system and genito-urinary tract.

The system of recitations, introduced during the preceding session, in connection with the practical work of the class in the dissecting room, has been extended during the present academic year and has proved of great practical value. Arrangements have been completed, and the necessary appropriation has been made by the Board of Trustees, for permanently installing a large part of the museum material in the dissecting room, as a study collection directly available for comparison and examination in connection with the practical laboratory work.

For the coming session of 1903-04 the department has organized a new laboratory course in mammalian morphology, with the design of serving as an introduction to the course in physiology.

Department of Astronomy.—The continued illness of Professor Rees throughout the second term has not interfered with the lec-

ture courses given by the department, for with the assistance of Professor Charles Lane Poor, formerly of the Johns Hopkins University, the work of instruction has been carried on as usual.

There has just been received, from the firm of Carl Bamberg of Germany, a portable universal transit instrument. This instrument is fitted with many new observing accessories, among which is a registering micrometer, the whole giving evidence of the superb mechanical skill of the German instrument makers. This new telescope is to be mounted in one of the small buildings situated near the corner of 120th Street and Broadway, which, as we may remind the readers of the *QUARTERLY*, still constitute the only astronomical observatory of Columbia University.

Two "Contributions from the Observatory of Columbia University" are in the hands of the printer: one by Professor Jacoby, forming a catalogue of stars near the South Pole of the heavens determined from measurements of photographs taken at the Cape of Good Hope; the other by Dr. Mitchell on astrophysical subjects.

Department of Botany.—Professor L. M. Underwood has continued his study of the flora of the West Indies and, during the past three months, has confined his attention largely to Cuba and Dominica. He has brought together a large collection of plants, especially rich in species of ferns and hepatics. These exsiccatae will be of unusual interest to the herbarium of the University in as much as they will represent the first extended study of the cryptogamic flora of these islands. They are expected to yield much material new to science and will materially extend our knowledge of the geographical range and relationship of many species. During the summer and fall, Professor Underwood will visit Kew and other botanical centers of Europe for the purpose of comparing his collections with those from adjacent districts.

Dr. C. C. Curtis is investigating the action of pure light and the rays of different wave lengths upon transpiration, and is also determining to what extent heat is a factor in the elimination of water from the plant.

Important additions have been made to the equipment of the department during the past quarter. Among these may be mentioned a series of swinging frames for the display of specimens

of our native trees and shrubs. These frames, about 3 by 4 feet square, are swung from the columns in the large laboratory room. The collection will comprise about 300 species arranged in biological sequence and will illustrate the winter condition of the plant as well as its flower, fruit and leaves. It is also purposed to show, by means of outline maps, the geographical distribution of the more valuable timber trees and the areas in which they reach their best development. In many cases photographs also will be introduced to show the habit of the species. The projecting lantern has been provided with a suitable stage, so that a microscope can be attached and used in the demonstration of microscopic structures. Views of sections of any material, as a leaf, stem, ovary, *etc.*, or of small living plants can be thrown upon the screen under a magnification of 200 to 800 diameters. In this way it has been possible to furnish suitable illustrations of structures and organs of which no charts were procurable.

The work of preparing charts to illustrate the various groups of plants and their ecological features has progressed steadily during the year. Already the bulk of the material for these illustrations has been collected and over sixty charts have been prepared. A number of frames have been placed upon the walls of the physiological laboratory, containing the records obtained by the students upon growth, irritability, nutation and other phenomena of plant life—records to which additions will be made from year to year. The herbarium of the department has been increased by the addition of nearly 1,000 specimens of our local flora. Arrangements have been made for the construction of two cases, one to accommodate the departmental library, the other to hold our increasing morphological collection.

Among the more important additions to the collection of photographs may be mentioned a series of enlargements illustrating forest conditions in the United States and a collection of engravings and photographs of botanical gardens and of prominent botanists of this country and of Europe. Noteworthy are several pictures of Linneus and of his home and laboratory.

Mr. H. D. House has been engaged in preparing a valuable series of microscopic slides for use in the various laboratory courses.

Department of Chemistry. General Notes.—Professor Chandler delivered, February 24, an address in the rooms of the University Club, Syracuse, before the local chemical society on "Electro-chemistry."

In response to a request from Hon. John Hay, Secretary of State, President Alexander Agassiz of the National Academy of Sciences appointed, on April 22, a committee consisting of Dr. John S. Billings, of New York, President Ira Remsen of the Johns Hopkins University and Professor C. F. Chandler of Columbia, to investigate the condition of the Declaration of Independence and to advise as to the best method of preventing its further deterioration.

On the evening of April 24, the American Section of the Society of Chemical Industry held its meeting in the chemical lecture room in Havemeyer Hall for the purpose of extending a welcome to the president of the society, Ivan Levenstein, of Manchester, England, and also to Dr. Friedrich Bayer and Dr. C. Duisberg of Elberfeld. Interesting novelties were shown by Professor Miller, Dr. Laudy and Mr. Tucker.

Physical Chemistry.—In order to make the most of the small laboratory space available for this subject and to avoid the overcrowding which has been much felt by the post-graduate students this year, the room which is now used as the office is to be transformed into a laboratory for research work. This room will accommodate the assistant and four advanced students, and will allow the carrying out of investigations in any line of physical chemistry. In case more room is necessary, one other can be placed in the new office. By this plan it will be possible for seven investigations to be carried on at once without too great overcrowding. The undergraduate laboratory has been rearranged so that now ten students can work at once, and consequently it is not necessary to subdivide the classes to the extent found necessary in the past.

On January 7 Professor Morgan gave a public lecture at the Medical School on "Osmotic pressure and ionization," the first of the series given by members of the staff of the School of Chemistry.

Laboratory of Industrial Chemistry.—Additions have been made in the installation for electro-chemistry, as this course has

been found very popular. Next year a modified course in this subject is to be given to the electrical engineering students, which will tax the equipment to the utmost. This course will include electric-furnace practice and some experimental work with aqueous solutions, and will supplement the lecture courses of Professors Crocker and Morgan. All the courses have been well attended this year, and special work has been carried on by a number of students.

Quantitative Analysis and Assaying.—In the quantitative laboratory the overcrowding, due to the great increase in the number of Applied Science students, has exhausted the facilities for graduate work. There is an immediate need of several separate rooms for graduate work, as it is only by dividing the students between the rooms of the instructors and the organic laboratory that the thesis work is carried on at present. In the assay laboratory an electric pyrometer has been installed, so that accurate measurements of the temperature of the furnaces can now be made. Other new installations are a shaking machine for extraction tests, a cupel machine and a mechanical sifter for ores.

Adjunct Professor E. H. Miller gave a public lecture on "Some analytical applications of ionization" at the College of Physicians and Surgeons, January 14, 1903. He has prepared for the students in mining engineering a special set of laboratory notes which have been type-written and are proving of great assistance in the laboratory work. Dr. H. C. Sherman lectured on "The nutrition investigations of the U. S. Department of Agriculture," at Teachers College in October, 1902. The work on the metabolism of nitrogen, sulphur and phosphorus in the human organism, begun by Dr. Sherman, in coöperation with the U. S. Department of Agriculture, in 1900, and conducted chiefly during the summer vacations, was completed last fall and was published in December as a bulletin of the Office of Experiment Stations.

In the summer session, the only change from last year is an enlargement of the course for teachers. This will be a course on theoretical chemistry and will include lectures, demonstrations and laboratory work. It is expected that those who take this course will devote their entire time to it for six weeks, from July 8 to August 19.

Organic Chemistry.—Eight different courses in this branch of chemistry are being conducted this year, the total number of students enrolled being seventy. This is by far the largest number ever handled by the department. During the last year at the old site (1896-97) but one course in organic chemistry was given to a total of four students, the department occupying a corner of the qualitative laboratory. Appreciation of the greatly improved laboratory facilities offered in Havemeyer Hall is clearly evident in the rapid increase in the number of students, the gain in six years being nearly 1800 per cent. The geographical distribution of the students is also of interest, there being men this year from as far west as Nebraska and California, while among the special research workers are graduates of the Universities of Heidelberg, Geneva and Turin.

Dr. Chambers has been reappointed a reader in chemistry for the entrance examinations to be conducted by the College Entrance Examination Board next June. During the past winter he presented reviews of the recent work of Emil Fischer upon the amino acids before the New York section of the American Chemical Society, February 6, and before the Society of Physiological Chemists, March 23.

At the joint meeting of the American Association for the Advancement of Science and of the American Chemical Society, held at Washington during the last convocation week, Professor Bogert read a paper upon "New syntheses in the phenmiazine group"; during November he lectured before the Good Citizens' League of Flushing, N. Y., upon "Some mysteries in a lump of coal"; on January 21 before the College of Physicians and Surgeons upon "Synthetic organic medicaments"; and on February 2 before the section of astronomy, physics and chemistry in the New York Academy of Sciences upon "Some products derived from coal." As a result of the lecture before the College of Physicians and Surgeons, 143 samples of recent important chemical and pharmaceutical products, valued at several hundred dollars, have been added to the chemical museum in Havemeyer Hall; these samples have been generously presented to Professor Bogert by the various prominent importers and manufacturers of drugs in this city.

The demand for competent chemists seems to be steadily increasing, and our fourth-year students are frequently engaged by manufacturers and educational institutions before graduation. At the present writing (April 18) four of the workers in the organic laboratory have already secured good salaried positions.

The Chemical Society.—The Columbia University Chemical Society has held during the past academic year several interesting meetings. Addresses were delivered by Captain H. P. Aspinwall, of the Laflin-Rand Powder Company, on "Smokeless powder" (November 20); by Mr. Maximilian Toch, of Toch Brothers Paint Company, on "The different industrial applications of paints" (December 17); by Dr. Francis D. Dodge, of Messrs. Dodge and Olcott, on "Artificial perfumes (January 15); by Professor George F. Barker, of the University of Pennsylvania, assisted by Dr. L. H. Laudy, on "Radio-activity and chemistry" (March 19); and by Mr. M. C. Whitaker, formerly tutor in the Chemical Department and now chemist for the Welsbach Light Company at Gloucester City, N. J., on "Recent progress in incandescent gas lighting" (May 7).

On April 13 the society gave a reception to the members of the graduating class in chemistry of Lehigh University. The Lehigh students, accompanied by Dr. Spanutius, the senior instructor in chemistry at Bethlehem, and by some of the graduates of the University, were escorted over the laboratories and museums of Columbia by the Chemical Society, and were then entertained at supper in University Hall. At the last meeting of the year, to be held at the home of Professor Chandler, June 1, an address will be made by Dr. Ernst J. Lederle, president of the New York Board of Health.

Department of Geology.—The officers of the department are making arrangements for the usual two field sessions with the students in the course in mining engineering. One squad will be given a week at Fort Ticonderoga, on Lake Champlain, where the opportunities are especially good. The class will leave New York Saturday night, May 30, and return for Commencement. The second squad will be taught in Colorado in connection with the Summer School of Mining. The exact locality must be chosen later.

Two courses, both by Professor Grabau, will be offered by the department at the summer session of the University. Mr. Shimer, assistant in palæontology, has been teaching two days weekly in the Massachusetts Institute of Technology, assisting Professor Crosby. Mr. D. W. Johnson, fellow in geology, has been appointed instructor in geology at the Institute for next year. Miss Ida H. Ogilvie, who completed her work for the doctorate in December, has been appointed lecturer in geology in Barnard College for the ensuing year. Mr. Fred. H. Moffit, fellow in geology, passed the months of February and March in field-work near Santiago, Cuba, making observations for his Ph.D. dissertation. His collections have reached New York and will be worked up during the summer and next year. Mr. C. W. Dickson, graduate student on a traveling fellowship from Canada, has completed his Ph.D. dissertation upon the "Geology of the Sudbury (Canada) deposits of nickel and copper ores." The dissertation was read at the Albany meeting of the American Institute of Mining Engineers in February.

Last winter Professor Kemp was elected one of the vice-presidents of the American Institute of Mining Engineers. He has also been honored with an election as corresponding member of the Academy of Sciences in Christiania, Norway.

Department of Mathematics.—Two new tutorships have been established in the department, in order to provide adequately for the instruction of sections in the prescribed courses. These tutorships have been filled by the appointment of Mr. Edward A. Hook, B.S., of the University of Wisconsin, 1900, and subsequently a graduate student of mathematics at Wisconsin and at Harvard, and of Mr. Clifford Gray, E.E. Columbia University, 1902, and a graduate student at Columbia, 1902-03.

Dr. C. J. Keyser has been promoted to the grade of adjunct professor. Professor Keyser is writing a series of articles dealing with the method of transition to algebra and geometry in secondary schools. His papers will shortly appear in the *Educational Review*.

At a recent meeting of the board of editors of the *Transactions* of the American Mathematical Society, Dr. Edward Kasner was appointed an associate editor.

At the first meeting of the Association of Mathematical Teachers of New England, which was held recently at the Boston Latin School, the principal address was made by Professor Fiske. His theme was the present state of mathematical teaching and he outlined a programme for the work of the society.

Department of Mineralogy.—The department has received several gifts of minerals collected by former Columbia students and others. Among these are a small collection made by Mr. Minturn Post, of the class of 1827, presented by his daughter; a number of minerals, most of which were collected near St. Louis, Missouri, by Mr. H. A. Wheeler, class of 1880, and some specimens collected by Professor Henry M. Howe. A very interesting suite of silver, copper, tin and lead minerals from San José, Bolivia, has recently been purchased, and by other purchases some gaps have been filled in the departmental collection. Dr. W. P. Jenney and Mr. B. F. Hill, of the Texas Mineral Survey, sent to Professor Moses some apparently new compounds of mercury which he is now examining—thus far he has found three and possibly four new species.

Three new polarizing microscopes have been presented by Mr. F. A. Schermerhorn.

The wooden crystal models cut by the late Professor A. H. Chester in the early days of the School of Mines, and representing abstract forms, have been supplemented by machine-made models of about the same size, representing series of forms of common minerals, and a new "practice collection" of one thousand unlabelled minerals has been completed.

For lecture purposes there has recently been purchased a number of large crystal models made of colored cardboard and representing both ideal and distorted forms, and for the new crystal collection small (five cm.) wooden models, mounted in correct position, representing the forms and general combinations in each crystal class.

Department of Physics.—A new professorship of experimental physics has been established, and the first incumbent of the chair will be Ernest F. Nichols, Sc.D., now professor of physics in Dartmouth College. Professor Nichols is a native of Kansas, and received his collegiate education at the Kansas Agricultural Col-

lege. He subsequently took courses at Cornell University and later studied abroad. He was for a time professor of physics in Colgate University, and for five years past has been professor of physics and director of the Wilder Laboratory in Dartmouth College.

Dr. Albert P. Wills, lately associate in applied mathematics and physics in Bryn Mawr College, has been appointed instructor in mechanics and mathematical physics. Dr. Wills is a graduate of Tufts College, 1894, and studied at Clark University from 1894 to 1897, receiving the degree of Ph.D. in 1897. For two years thereafter he was a student at the Universities of Berlin and Göttingen, and then accepted the position at Bryn Mawr College.

Bergen Davis, Ph.D., who is now completing his residence abroad as Tyndall fellow of Columbia University, has been appointed tutor in physics. He is at present carrying on investigations under the direction of Professor Thomson in the Cavendish Laboratory at Cambridge, England.

Department of Zoölogy.—The Department of Zoölogy will be well represented during the present season at the various marine zoölogical stations. Professor Wilson is continuing his work in experimental embryology at Naples. Here also is working Mr. Charles L. Zeleny, lately a graduate student in zoölogy. At Woods Hole Messrs. Calkins, Crampton, McGregor and Strong will occupy positions on the teaching staff of the Marine Biological Station; research tables will be occupied by Messrs. Osburn, Brues, Rea and Hussakoff; Dr. F. B. Sumner, formerly fellow in zoölogy, will be the director of the Fish Commission Laboratory. At Harpswell, Maine, Mr. Naohidé Yatsu, fellow in zoölogy, will continue his researches upon the fertilization of the egg of the nemertean *Cerebratulus*. Mr. Dublin will visit the Beaufort Laboratory during the month of June, endeavoring to secure further developmental stages of *Renilla*; he will later carry on work at Cold Spring Harbor, as the John D. Jones scholar in biology. Professor Osborn purposes to remain in the neighborhood of New York during the summer, continuing work upon his history of the mammalia. Dr. Dean will also remain in the city and hopes to complete the manuscript of his monograph on "*Chimæroid fishes*," which the Carnegie Institution has lately

accepted for publication. Dr. Calkins plans to spend a part of the summer in Buffalo, where, as biologist of the State Cancer Hospital, he will study the life history of a microörganism supposed by recent investigators to be the cause of cancer.

During the present semester the seminar in zoölogy held ten meetings and was largely attended. The subject, "Variation and inheritance," was discussed under the following headings: Introduction and historical review of the subject: the points of view of Darwin, Brooks, Galton, Naegeli, Weismann, Eimer and DeVries (Professor Osborn). Inheritance from the internal and physiological point of view: the results of cytologists (Professor Calkins). The history and present status of the question of acquired characters and natural selection (Professor Dean). On variation and heredity from the standpoint of the school of Professor Eimer (Dr. Mayer of the Brooklyn Institute), and from the standpoint of palæontology (Professor Grabau). Variation and environment as conditioned by physical and chemical changes (Messrs. Osburn and Brues). The recapitulation theory of development in relation to the general problem of heredity (Professor Morgan of Bryn Mawr). The general problem from the standpoint of anthropology and psychology (Professor Farrand). The statistical study of variation (Professor Boas). Discontinuous variation in plants and animals (Professor MacDougal and Dr. McGregor). Hybridity, Mendel's law, and the latest aspects of heredity (Professor Crampton).

FACULTY OF APPLIED SCIENCE

Department of Electrical Engineering.—The important resistance standards of this department have been sent to Washington to be checked at the National Bureau of Standards. There have been purchased a Weston laboratory standard voltmeter, with a multiplier to read to 750 volts, and a laboratory standard milliammeter with shunts to read up to 500 amperes. Using these as secondary standards all the measuring instruments of the department can be kept in proper condition.

Four interesting and instructive models of modern electrical machinery have been presented to the department by the Crocker-Wheeler Company of Ampere, New Jersey. The Westinghouse

Electric and Manufacturing Company has very kindly loaned to the department a number of electrical measuring instruments for the purpose of conducting tests on electric elevators.

A course of lectures has been given to the fourth-year electrical engineers by Mr. Philip Torchio, engineer of the New York Edison Company.

The members of the American Electro-Chemical Society made a visit, April 18, to the Electrical Engineering Department and were entertained by Professor Crocker and his staff.

In accordance with the policy of the department, numerous engineering investigations and tests have been made for commercial interests. Such work forms an important part of the conduct of the department and gives to the students valuable information.

The requests for engineering graduates from the various large companies and other interests have been numerous. The telephone, electric light and power companies require technical men in large numbers.

Department of Mechanical Engineering.—At the February meeting of the Board of Trustees, Instructors Ralph E. Mayer and Ira H. Woolson were promoted to adjunct professorships, and Dr. Charles E. Lucke to the grade of instructor.

The course on graphical statics has been given this year by Mr. Thomas H. Harrington. Mr. A. M. Cregier has conducted the course in naval architecture and marine auxiliaries. Marine engineering courses 31, 41 and 42, given by Professor Cathcart, have been extended; and taken in connection with the courses given by Mr. Cregier they furnish the students with more work of a purely professional nature than has been available in former years.

The department has kept in touch with general practice by commercial testing, shop and installation visits and laboratory research. Most of the research at this time is being directed to determination of the possibilities of new methods of power generation by steam and gas turbines and gas engines.

For the first time since its installation the entire equipment of the mechanical laboratories in the west vault has been used in the courses in experimental mechanical engineering conducted by Dr. Charles E. Lucke. The work this year has been taken by

the third and fourth year classes in both mechanical and electrical courses. It is expected that next year both civil and mining engineers will take this work, so that students of all engineering courses will be receiving instruction in the practical operation and testing of the most important driving and driven machines. The students of the graduating class, twenty-five in number, are now at work on their theses, most of which involve research by special apparatus, the subjects in many cases being sub-problems in the more extensive researches of the officers of the department. Probably the most important are those involving determination of the laws of the free expansion of steam and air, also quantitative measurements of many phenomena as yet known only qualitatively.

In the testing laboratory, both student work and commercial investigations have been actively prosecuted during the last three months. Mr. Woolson continues his laboratory tests upon fire-proofed wood and other fireproof materials. On April 21 and 22, he conducted, in connection with Professor C. L. Norton, of the Massachusetts Institute of Technology, two very successful public tests in the Borough of the Bronx of reinforced concrete floor constructions. These were fire, load, and water tests, the one of a standard six-foot span, and the other of a fifteen-foot span. The latter was unique in that it was the first large span of that character to receive such a test, so far as is known, in this country. Engineers and representatives of the building departments of all the boroughs of this city, and from Philadelphia, Washington and Boston, were present to witness the tests. Two other similar buildings are now being constructed and will be tested in a few weeks.

Students of the third class made their annual three-day excursion to the Bethlehem Steel Works in Easter Week under the guidance of Mr. C. C. Sleffel, instructor in forging. They report a pleasant and very profitable trip.

Department of Metallurgy.—The following apparatus has been added to the equipment of the department: a complete set of foundry materials for the manufacture of castings in iron, steel, brass, bronze, aluminum, *etc.*; a new electric furnace, Howe model; a new gas-fired crucible furnace; a chemical hot plate;

additional apparatus for electrolysis; a resistance box for adapting some of the pyrometers of the department to still higher temperature measurements; and an index reference catalogue to sixty-two of the more important periodicals devoted to metallurgy, covering the twelve years ending with January, 1903. This catalogue is in card form, and was compiled by H. O. Hoffman, professor of metallurgy, Massachusetts Institute of Technology, and non-resident lecturer in this department.

The classes in metallurgy have visited the copper works of the General Chemical Company, Laurel Hill, N. Y.; the smelting works of the Balbach Smelting and Refining Company and of the N. J. Zinc Co., Newark, N. J., and of the American Smelting and Refining Company, Perth Amboy, N. J., and the works of the Joseph Dixon Crucible Company, Jersey City, N. J.

FACULTY OF MEDICINE

Department of Diseases of Children.—Professor Holt has been assigned to a seat in the Medical Faculty.

Department of Gynæcology.—After an incumbency of the chair of gynæcology for nineteen years Professor Tuttle has resigned, his resignation to take effect at the end of the present academic year. Professor Cragin will take charge of the didactic and clinical instruction in the department during the session of 1903-04. Drs. Frank S. Mathews, Frank R. Oastler and Howard C. Taylor have been appointed instructors in gynæcology. Dr. William S. Stone has been promoted to be chief of clinic.

Department of Materia Medica and Therapeutics.—Beginning with the next academic year this department will be under the direction of Dr. Christian A. Herter, who has been appointed professor, *vice* Professor Peabody, resigned. Dr. Herter thus returns, as a member of the faculty, to the institution in which, after a two years' course in Columbia College, he received his medical education and in 1885 his degree of M.D. During the year 1885-86 he served as an interne in Bellevue Hospital. The two following years, 1886 to 1888, he passed in special studies under Professor Welch at Johns Hopkins University and Professor Forel at Zürich. Since 1888 he has been actively engaged in medical work, chiefly in New York, as a private and hospital

practitioner, as a laboratory investigator, and as a teacher. He has held positions as visiting physician at the City Hospital, consulting physician at the Babies' Hospital, consulting neurologist to the Society of the Lying-in Hospital, and consulting pathological chemist to the Craig Colony for epileptics. Since 1898 he has held the professorship of pathological chemistry at the New York University and Bellevue Hospital Medical College. He is a member of the Association of American Physicians, the American Neurological Society, the American Physiological Society, and the medical societies of the city and state, and is one of the directors and treasurer of the Rockefeller Institute for Medical Research. Besides being the author of numerous articles in the scientific journals, he published in 1902 "Lectures in chemical pathology, in its relation to practical medicine."

Department of Ophthalmology.—Dr. Arnold Knapp has been appointed lecturer, *vice* Professor Herman Knapp resigned.

Department of Physiology.—During the months of February and March Professor Curtis gave a series of eight illustrated lectures on the physiology of the nervous system and the related parts, before large audiences at the Cooper Union. The subjects were as follows: "How we know that the brain is the seat of feeling, thought and will"; "How the nerves work"; "How the muscles work"; "How we see"; "How we hear"; "Taste, smell and touch"; "The involuntary workings of the nervous system"; "How our bodies keep their balance." On March 20 Professor Curtis lectured in the Sheffield lecture course at Yale University on "The discovery of the use of the arteries; or experiment versus subtlety in biology."

Professor Lee has been elected one of the scientific directors of the New York Botanical Garden.

The title of Dr. Burton-Opitz has been changed from assistant demonstrator to instructor. Dr. Opitz has been devoting much time to a careful investigation of the hitherto little known subject of the flow of the blood in the veins. He has measured accurately the pressure exerted by the blood on the venous walls; and has studied the relation of the venous flow to the contraction of skeletal muscles, the nature and velocity of the venous pulse, the question whether a backward flow ever occurs in the veins, and

other problems. As the results have been obtained they have appeared from time to time in the physiological journals. Dr. Opitz will offer in the summer session a course, consisting of lectures and laboratory work, in elementary physiology.

During the past year Dr. Emerson has held one of the fellowships of the Rockefeller Institute for Medical Research. He has recently completed in this laboratory a series of successful experimental studies on the function of the capsule of the kidney; and is now investigating the effects of the introduction of oxygen into the veins, and the possible action of oxygen in poisoning by strychnine.

The staff of instructors in the department has been increased by the appointment of Drs. Guy Cochran and Leander H. Shearer as assistant demonstrators of physiology. The former graduated at Leland Stanford Jr. University in 1896 and at the College of Physicians and Surgeons in 1900. Dr. Shearer took his bachelor's degree at Princeton in 1897 and his doctorate in medicine at the College of Physicians and Surgeons in 1901. Both served as internes at Bellevue Hospital subsequent to graduation from the medical school.

Department of Surgery.—Professor Weir has resigned as professor of surgery and has been appointed professor of clinical surgery. Dr. Joseph A. Blake has been appointed lecturer and Dr. George E. Brewer clinical lecturer in surgery.

FACULTY OF LAW

The retirement of Professor Keener from the Faculty of the Law School, foreshadowed in his appointment to the bench of the Supreme Court last fall, has occasioned important changes in the personnel of the teaching body and in the arrangement of the courses of instruction. It is not too much to say that, as Professor Dwight was the great personality of the Law School during the first thirty years of its existence, so Professor Keener was, in the decade from 1890 to 1900, an equally commanding figure. Coming to Columbia in the critical period of transition from the old order to the new, his strong personality and progressive methods, combined with his remarkable gifts as a teacher, made him the natural master of the situation, and forced him into

the position of the leader of a revolution. How faithfully he played this unsought *rôle*, with what a fine devotion to his ideals and with what a clear vision—how strenuously and uncompromisingly, also—is a part of the history of the school and of the University. The inductive method of teaching law, introduced by him into the school, never had a more confirmed disciple nor a better exponent. That his work has been in the highest degree constructive is evinced by the fact that his retirement has been accomplished without impairing the strength of the institution or checking its steady advance in standards and efficiency.

Announcement has already been made of the fact that, with the next academic year, the School of Law becomes a graduate department of the University; only graduates of approved colleges and persons of equivalent academic training are to be admitted to membership. Coincidentally with this raising of the standard of admission, the curriculum will be enriched and the teaching force increased. New courses in the law of damages and in admiralty law will be offered, and two half-year courses—mortgages and insurance—are to be expanded into full courses running through the year. The course in domestic relations and the law of persons, heretofore given irregularly in the first year, receives a definite status as a part of the regular work of the second-year class. It is also planned to offer, in the near future, courses in mining and patent law, in the law of receivers, and in the history of the common law.

The immediate changes in the Law Faculty are the transfer of Professor Kirchwey to the Kent chair of law, rendered vacant by Professor Keener's resignation; the appointment of Professor James B. Scott, A. M., J. U. D., now dean of the Law School of the University of Illinois, to a professorship; and the promotion of Mr. Stone from the position of lecturer to an adjunct professorship. Two new lecturers also have been appointed, Mr. Francis C. Huntington, A.M., LL.B., and Mr. Jackson E. Reynolds, A.B., LL.B., both of New York City.

Professor Scott is a man of about thirty-five years of age and has had a very unusual academic experience for a lawyer and teacher of law. He is a graduate of Harvard College where he took his A.B. in 1890 and his A.M. in 1891. In the latter year he

was appointed to a fellowship and spent three years abroad in legal study at Berlin, Heidelberg and Paris, taking the degree of J.U.D. at Heidelberg in 1894. From 1895 to 1899 he practiced law at Los Angeles, California. In 1896 he established a law school at Los Angeles of which he became dean. He carried this on for three years and his work was of such exceptional quality that he was called to the position he now occupies in the University of Illinois in 1899.

Mr. Huntington is also a graduate of Harvard College (1887) and of the Harvard Law School, taking the degrees of A.M. and LL.B. in 1891. In 1896 and 1897 he was lecturer in New York practice in the Harvard Law School. Since 1891 he has been engaged in the practice of law in New York City.

Mr. Reynolds is a graduate of Leland Stanford University (1896) and took his law course at Columbia, graduating in 1899. Immediately on taking his degree he was called to an instructorship in law at Leland Stanford and in 1900 became assistant professor of law in that institution. During the past two years he has been engaged in the practice of his profession in this city.

Professor Scott will have charge of the first-year course in equity, of the second-year course in quasi-contracts, and of the third-year courses in mortgages and suretyship. To Professor Stone have been assigned two of Professor Keener's most important courses, trusts and third-year equity. He will continue to conduct the work of the first-year class in criminal law, but will resign his course in insurance to Professor Burdick and that on bailments and carriers to Mr. Reynolds. Professor Canfield will take Professor Keener's course in corporations and will relieve Professor Burdick of his course in negotiable instruments, turning over agency to Mr. Reynolds and resigning evidence to Mr. Huntington. Mr. Hayes will give the new course in damages; and Mr. Kaps, who has been acting as Professor Redfield's assistant in pleading and practice, has been promoted to a tutorship and will have sole charge of the moot courts, which are to be made a more important feature of the work of the School.

The lectures by eminent judges and lawyers, which have excited so much interest among students and graduates of the school during the past season, are to be continued next year, probably under the auspices of the Alumni Association.

THE FINE ARTS

General.—In pursuance of suggestions contained in the circular letter issued early in the year to the various departments of the University, urging the creation of divisional organizations to consist of all the officers giving instruction in any group of related subjects, the Division of the Fine Arts was organized in February with Professor Ware of the School of Architecture as chairman and Mr. McWhood of the Department of Music as Secretary. The division includes the officers of instruction of the School of Architecture, of the Departments of Music of Columbia University and Teachers College, of the Department of Fine Arts of Teachers College, and of the Department of Comparative Literature of the University. A committee was appointed to prepare the draught of a divisional announcement or bulletin of information; and another committee to take charge of the organization of the public lectures in the fine arts for the coming year.

The course of public lectures on the fine arts which has been given during the year in the large lecture room of Havemeyer Hall came to a close with two lectures by Professor A. V. Churchill of Teachers College on the afternoons of April 8 and 13, on mural painting. There have been given in all twenty-three lectures, by eleven different officers of the University; and the attendance has been such as to prove conclusively the public demand for such a course. It is hoped that next year it will be possible to arrange for series of six or eight lectures on each of several general topics.

School of Architecture.—The subjects of the graduating thesis designs include a public library; a Gothic suburban church; a country school in Elizabethan style; a museum; a country club on the Palisades; a city mansion; a court house; the architectural treatment of South Field, and the architectural treatment of the new property of Barnard College. The closing design of the fourth year was that of a State capitol, in connection with which Mr. Cass Gilbert, architect of the new custom house in New York and of the Minnesota State capitol, gave the class on April 22 a very instructive lecture on the planning and design of buildings

of this kind. The designs in competition for the McKim fellowships in architecture were sent in on April 18 from all the competitors except those in Paris, whose work will arrive later. The subject was a memorial tower to Henry Hudson, in Central Park. The jury will consist of practising architects, graduates of the school, and the award will be made some time in May.

. BARNARD COLLEGE .

Department of Classical Philology.—Mr. Burchell having resigned his appointment as tutor in the department, Miss Gertrude M. Hirst, Ph.D. (Columbia), at present assistant, becomes tutor, and Mr. Stephen A. Hurlbut, A.M. (Wisconsin), at present university fellow in Greek, becomes lecturer in classical philology. A new Latin course in theme writing, to be known as Latin 23, will be offered by Professor Knapp in the academic year 1903-04.

Department of English.—Three new courses will be offered next year: English 48, a graduate course in eighteenth century literature, open to qualified Seniors, by Professor Trent; English 22, dealing with English fiction in the nineteenth century, by Professor Brewster; and English 9, an elective course in argumentation for Juniors and Seniors, to be given by Miss Gildersleeve. The last of these will be offered yearly; the others in alternation with existing courses.

Department of History.—There will be some rearrangement of the work in history in 1903-04. Dr. Shepherd's return relieves Mr. Fleming of course 4, on American history. Dr. Shepherd will also take over course 31, which will be made a full-year course. By these changes Dr. Shepherd will have sole charge of the American history. Dr. Shotwell takes over the course on modern European history, but will offer it alternately with the course on mediæval history. Dr. Botsford offers Roman history, in place of the Greek history given this year, and will take course 3 in English history as well.

During the second half of the current year, Professor Robinson's lecture course has been taken by Miss Davison. Much regret is felt that she and Mr. Fleming sever their connection with the department and Barnard College next year.

The department has added to its equipment during the past year two series of historical charts and several maps.

•

Department of Romance Languages and Literatures.—Dr. Richard Thayer Holbrook has been appointed tutor for 1903-04 on a Barnard College foundation. He was graduated with the degree of A.B. from Yale University in 1893; studied at the Universities of Paris and Berlin, 1895-96; was tutor in Romance languages at Yale, 1896-1901; became a graduate student at Columbia in 1901 and was appointed assistant in French at Teachers College for the year 1902-03. He received his doctorate from Columbia University, the subject of his dissertation being Dante and the animal kingdom. He will take charge of French I and II. French III will be given next year by Mr. Jordan.

A new Columbia University course in Italian (6), covering the outline history of Italian literature, will be open in 1903-04 to qualified Seniors of Barnard College.

All the instruction in Spanish in 1903-04 will be under the charge of Mr. Loiseaux. There will be, for the first time, a course in elementary Spanish; and a third-year course is offered on the novels of the golden age, especially suited to those students who took Spanish 2a in 1902-03. For the latter course will be substituted in 1904-05 two courses to be given in alternate years, one on Don Quixote and the age of Cervantes, the other on the Spanish classical drama.

TEACHERS COLLEGE

The Speyer School.—The dedication of the Speyer School occurred on the afternoon of April 23, with addresses by Stephen H. Olin, president of the University Settlement Society; William H. Maxwell, superintendent of the city schools; President Butler and Dean Russell. The donor, James Speyer, also made a brief address on the purpose of the gift. President Butler's address laid emphasis on the value of the school as an experimental station, such as are to be found in other lines of investigation and cannot be furnished by the public schools. Dean Russell spoke of the importance of the school as a community center, as the plant is to be at the disposal of the community at all hours of the day and night. A further purpose of the school is to bridge the gap that occurs between the close of public school work and the time when young men and women settle down to permanent employment.

The theme of Superintendent Maxwell's address was the ethical and moral aspect of the school—an aspect which is too largely ignored in public school work and which is to receive especial attention in the Speyer School.

Meeting of the Historical Association.—The Historical Association of the Middle States and Maryland held its first annual meeting at Teachers College, March 14 to 16, with about 150 representatives in attendance from most of the colleges, and many of the more important secondary schools of the States within the association. This association was formed a year ago in connection with the Association of Colleges and Secondary Schools of the Middle States and Maryland, for the purpose of studying methods of teaching history. Among the topics discussed were: "The apparatus of the modern text-book"; "Some essentials of a text-book"; "The text-book from the teacher's point of view"; "What may reasonably be expected of the high-school teacher of history," and "The study of local institutions." Professor W. M. Sloane of the University delivered the evening lecture, on "The Louisiana purchase as the turning point of American history." Of the Teachers College staff, Dean Russell, Professor Sachs, Professor Salmon, Dr. Howland and Miss Eliza Butler participated in the meetings. Professor Salmon was elected president for the coming year and Professor Castle secretary and treasurer.

Extension Work.—The new Department of University Extension work will be fully organized before the close of the present term under the direction of its new head, Professor Frederick H. Sykes, Ph.D., who comes from the American Society for the Extension of University Teaching, after a service of six years. Professor Sykes is a graduate of the University of Toronto, a doctor of philosophy of Johns Hopkins University, and a member of Exeter College, Oxford; he has been associated as lecturer with the University of Toronto, Johns Hopkins University, and the University of Chicago. The new department is a University department but is under the direction of the Faculty of Teachers College. Three classes of courses are to be offered: collegiate courses consisting of thirty lectures and conferences; professional courses on educational subjects corresponding to the above courses; and lecture courses of six lecture periods each lasting

an hour and a half, including lectures and conferences. The courses of the first and second group are such as are now being given by various members of the College staff; the lecture courses are to be developed in a great variety of subjects, and it is hoped to secure the support and aid of every department of the University in their development. Only for the full thirty-hour courses is any credit to be given.

Departmental Notes.—As one phase of the experimental work in connection with the Speyer School, the Department of Psychology has been making a series of mental examinations and records with the view of giving concrete help to the teachers in their practical treatment of individual pupils. The same department is engaged in a detailed study of the mental traits of a group of children who are practically unresponsive to ordinary school work and are commonly called defective. In the Department of History and Principles of Education, President Butler and Dean Russell offer a new course for the coming year on "Problems of present day education." The Department of Secondary Education, newly organized this year under Professor Sachs, has had a registration of 48 in course 57, about one-half of whom are Barnard and Columbia College seniors and one-half graduate students. The second course (course 116) is limited to graduate students of previous experience in school work, and is devoted to the advanced study of problems in secondary education. The Mathematical Department has been arranging a course of study for trade schools, endeavoring to adapt the course to the immediate needs of the Manhattan Trade School, so that the problems will relate to the trades which the girls will enter. The department has placed a collection of models in the educational museum. Types of material used in the various grades from the kindergarten to the college are displayed, with cards giving directions as to preparation or purchase. Through the kindness of Mr. George A. Plimpton, graduate students taking the practicum this year are enabled to study sixteenth century mathematics from the sources, in his valuable library of early mathematical text-books. The Music Department intends to offer a course in the literature of the piano-forte appropriate for school uses, for the purpose of helping teachers who already have some skill in playing. This

department has given a series of public lectures, recitals and concerts during the past year. One of the lecture recitals was by Mr. Goldmark, on Wagner's Rheingold; one on music for childhood with special reference to Indian themes. The Choral Club has given two concerts, the first consisting of madrigals and music of the olden time, with Shakspearean and other glees. Four chamber concerts were also given. The Domestic Art Department gave a short course on hand-loom weaving, which was of considerable public interest. This course is to be expanded into an extension course. [For a full list of new courses see p. 370.]

General Notes.—A number of important addresses and entertainments have been included in the series of public events. On Friday, April 17, Booker T. Washington spoke to a very large audience on "Industrial training"; on Monday, April 20, W. W. Stetson, superintendent of education in the State of Maine, spoke on "Phases of the rural school problem in the North." One of the most popular entertainments of the year was the complimentary concert given by the Liederkrantz Society on the evening of April 1. On the afternoon of April 24, an authors' reading was given in the Horace Mann Auditorium, in which Charles Battell Loomis, Edward W. Townsend, George Carey Eggleston, E. C. Stedman, Mrs. Ruth McEnery Stuart and Dr. Henry van Dyke participated.

Members of the faculty have participated by public addresses in a great variety of educational movements and meetings during the quarter. Professor C. R. Richards read a paper on "Some practical problems in manual training" before the committee meeting of the Department of Superintendence of the National Educational Association. Professor S. T. Dutton has given addresses before the New York Association of Sunday School Teachers, the Woman's Ethical Conference, the State Normal School at Hyannis, Massachusetts, and the Highland Schoolmasters Association of Newburgh. Miss C. Geraldine O'Grady presented a paper on "The methods and curriculum of the kindergarten training school" at the meeting of the International Kindergarten Union, held at Pittsburg, April 13. Miss Marie R. Hofer, of the Department of Music, gave a number of recitals on kindergarten and school music at New Orleans during the Easter vacation, and

addressed the Public School Teachers Association at that place. The recent growth of public interest in domestic art work has given rise to a great demand for work of popularization by this department. Mrs. Woolman, the director, has lectured in more than a dozen places during the last quarter, on "The relations of household arts and crafts." Professor A. V. Churchill, Professor Richards and Mr. Louis G. Monte of the Art Department, addressed the Eastern Art Teachers Association at their Baltimore-Washington meeting. Professor Churchill is the president of the association for the current year. Professor David E. Smith has recently been elected a member of the publication committee of the American Mathematical Society; he has also been elected librarian of the society and continues his editorship of its *Bulletin*. Professors Smith, Wood and Dutton will participate in the Boston meeting of the National Educational Association.

A number of changes in the faculty have occurred. The election of Professor Sykes has been mentioned. Mrs. Mary Schenck Woolman, head of the Department of Domestic Art, has been promoted to a full professorship; Louis Rouillion, E. W. Bagster-Collins, and Dr. Maurice H. Bigelow have been promoted from instructorships to adjunct-professorships. Mr. Henry Carr Pearson, lately principal of the Allegheny (Penna.) Preparatory School, has been appointed to the principalship of the Horace Mann Elementary School, to succeed Miss Julia H. Wohlfarth, resigned. Mr. Rudolph I. Coffee, for two years assistant in the Department of the History and Principles of Education, has been appointed to the superintendency of the Jewish Orphan Asylum on 137th Street and Amsterdam Avenue, the largest institution of this kind in the city.

The catalogue for the year, issued in April, shows a total enrolment of 729 resident students. In addition, instruction is being given to 1,777 students in extension classes. The enrolment in the Horace Mann and Speyer Schools is 1,052. From the same publication it appears that there will be about 150 diplomas to be conferred at the coming Commencement. At the April meeting of the faculty, a gift of \$5,000 was announced from Miss Caroline Phelps Stokes, for the founding of a scholarship in domestic science.

SUMMARIES OF UNIVERSITY LEGISLATION

THE TRUSTEES

March Meeting.—It was voted that the 150th anniversary of the foundation of King's College, occurring on October 31, 1904, be celebrated with appropriate academic ceremonies, and that the arrangements for such celebration be referred, with power, to a special committee consisting of three members of this Board, of whom the Chairman shall be one, and of five members of the University Council to be appointed by the President. The Chairman appointed to serve with him on such special committee the President of the University and the Clerk of the Board.

The thanks of the trustees were voted to Messrs. Richard A. Parker, Frank Lyman, Edward D. Self and Daniel J. Leary for gifts for the equipment of the Department of Mining.

The following sums were appropriated for the current expenses of maintenance and operation of this Corporation for the fiscal year ending June 30, 1904, *viz.*: for educational administration and instruction, buildings and grounds, the library, and business administration, \$1,045,448; for interest, \$136,726.80; for taxes and other charges, exclusive of interest, upon the Williamsbridge, Sixteenth Street and Loubat properties, and for annuities, \$91,820; making in all the sum of \$1,273,994.80.

The thanks of the Trustees were tendered to Russell H. Chittenden, Ph.D., Director of the Department of Physiological Chemistry since July 1, 1898, for his services in or-

ganizing the work of the Department.

It was voted that a Department of Physical Education be organized with Dr. Thomas D. Wood, Professor of Physical Education in Teachers College, as its head.

The title of Professor of Materia Medica and Therapeutics was changed to Professor of Therapeutics and Clinical Medicine, from and after July 1, 1903.

The following appointments were made: Ernest F. Nichols, Sc.D., Professor of Experimental Physics from July 1, 1903, with a seat in the Faculty of Pure Science; George L. Meylan, M.D., Adjunct Professor of Physical Education and Medical Director of the Gymnasium from July 1, 1903, with a seat in the Faculty of the College; D. Stuart Dodge Jessup, M.D., Medical Visitor of the University; and Laura D. Gill, A.M., Adviser to Women Graduate Students.

The following reappointments were made, to take effect July 1, 1903: William P. Trent, A.M., LL.D., Professor of English Literature; Herbert G. Lord, A.M., Professor of Philosophy; Henry Rogers Seager, Ph.D., and Henry L. Moore, Ph.D., Adjunct Professors of Political Economy; and Mortimer Lamson Earle, Ph.D., Professor of Classical Philology in Barnard College.

The following were promoted: Livingston Farrand, Ph.D., now Adjunct Professor of Psychology, to be Professor of Anthropology, with a seat in the Faculties of Philosophy and of Barnard College;

Nelson Glenn McCrea, Ph.D., now Adjunct Professor, to be Professor of Latin; Harlan F. Stone, A.M., LL.B., now Lecturer, to be Adjunct Professor of Law; Gary N. Calkins, Ph.D., now Instructor, to be Adjunct Professor of Zoölogy, with a seat in the Faculty of Pure Science; Charles A. Strong, A.B., now Lecturer, to be Professor of Psychology; Cassius Jackson Keyser, Ph.D., now Instructor, to be Adjunct Professor of Mathematics, with a seat in the Faculties of Columbia College and of Pure Science; Ralph E. Mayer, C.E., now Instructor, to be Adjunct Professor of Mechanical Drawing, with a seat in the Faculty of Applied Science; Ira H. Woolson, E.M., now Instructor, to be Adjunct Professor of Mechanical Engineering, with a seat in the Faculty of Applied Science; Herschel C. Parker, Ph.B., now Instructor, to be Adjunct Professor of Physics, with a seat in the Faculties of Applied Science and of Barnard College; Margaret E. Maltby, Ph.D., now Instructor in Chemistry, to be Adjunct Professor of Physics, with a seat in the Faculty of Barnard College; Herbert M. Richards, S.D., now Instructor, to be Adjunct Professor of Botany, with a seat in the Faculty of Barnard College.

The following resignations were accepted, to take effect June 30, 1903: George L. Peabody, M.D., Professor of Materia Medica and Therapeutics; William Ledyard Cathcart, Adjunct Professor of Mechanical Engineering; and Watson L. Savage, M.D., Director of the Gymnasium; Dr. Savage continuing in charge of the work in phys-

ical training announced for the Summer Session of 1903.

The appointment, by the President, of Arthur C. Neish, A.M., Tutor in Chemistry, to succeed Carl Ernst, Ph.D., resigned; and the appointment, by the Faculty of Columbia College, of Allen B. Nelson, A.B., Assistant in Physics, to succeed W. W. Comstock, resigned, from March 1, 1903, for the remainder of the academic year, were confirmed.

April Meeting.—In view of the facts that the late Dorman B. Eaton left a bequest to the Trustees of Columbia College of \$100,000 for the purpose "of endowing and maintaining a Professorship of Municipal Science and Administration in said College," and that a Professorship of Administrative Law has heretofore been established in the College, devoted to the giving of instruction on the principles of Municipal Science and Administration, it was voted that the professorship now held by Professor Frank J. Goodnow should be abolished from and after June 30, 1903, and that the "Eaton Professorship of Administrative Law and Municipal Science" should be established from and after July 1, 1903, and that Professor Frank J. Goodnow, now Professor of Administrative Law, should be appointed Eaton Professor of Administrative Law and Municipal Science. It was also voted that the bequest of Mr. Eaton should be designated the "Dorman B. Eaton Fund," and should be held as a permanent investment.

The thanks of the Trustees were tendered to the subscribers to the fund to establish the Margaret Fuller Graduate Scholarship in English

Literature and Letters. Under the terms of the foundation, this scholarship is to be open, during the year 1903-4, to women who have taken the degree of Bachelor of Arts, provided that applicants who have taken the degree of Bachelor of Arts after two years of study at Barnard College shall be preferred, and provided, further, that the holder of this scholarship shall pursue at Columbia University graduate studies in English leading to the degree of Master of Arts or Doctor of Philosophy. The thanks of the Trustees were also tendered to the daughters of the late Dr. Minturn Post, A.B. Columbia, 1827, for their gift of their father's collection of minerals; and to Messrs. Willard Parker Butler, Edward L. Dufourcq, Halbert P. Gillette, Eugene Merz, William Y. Westervelt, Irving S. Lydecker, Oscar R. Foster, Percy K. Hudson, Reginald H. Thayer, Frederick T. Rubidge, and Albert P. Baumann, for gifts for the equipment of the Department of Mining.

The budget for 1903-4 was amended by appropriating \$400, chargeable to the income of trust funds, for the Gustav Gottheil Lectureship; and by appropriating an additional sum of \$56.94 for planting trees, *etc.*, on the University grounds.

The resignation of George M. Tuttle, M.D., as Professor of Gynæcology was accepted. Edwin B. Cragin, M.D., Professor of Obstetrics, was assigned to take charge of the lectures and clinical work in gynæcology during the academic year 1903-4.

The following appointments were made on the nomination of the

Medical Faculty: Arnold H. Knapp, M.D., Lecturer in Ophthalmology; James D. Voorhees, M.D., Lecturer in Obstetrics; Edmund L. Dow, M.D., to be Demonstrator of Pathology at Bellevue Hospital; and John S. Thacher, M.D., to be Clinical Lecturer in Medicine at the Presbyterian Hospital. On the nomination of the Faculty of Political Science, George J. Bayles, Ph.D., was appointed Lecturer on Ecclesiology.

May Meeting.—The thanks of the Trustees were tendered to a graduate of Columbia College in the Class of 1848 for a gift of \$1,500 to meet the cost of binding the books given to the University by the Government of China; also to Messrs. Robert M. Raymond, E.M., '89, and Percy K. Hudson, E.M., '99, for gifts to the Special Fund for the Department of Mining; also to Mr. and Mrs. Frederick S. Lee for a gift to the Department of Physiology, and to Miss Lucy Newton for the gift of a collection of casts of ancient and modern medallions.

An agreement between the University and Roosevelt Hospital for the endowment of four beds to be known as the "Abraham Jacobi Beds," to take the place of the present agreement relative to the Abraham Jacobi Ward, was submitted and approved.

The sum of \$8,000 was appropriated for the improvement and development of the property at Litchfield, Connecticut; also \$138.40 for the Department of Physiology for the purpose of meeting obligations properly incurred against the appropriation for 1901-2, but which were not paid through the Bureau

of Supplies. The budget for the year 1903-4 was amended as to the provisions for the Law School, and as to the Departments of Gynæcology, Economics and Social Science, Chemistry, Latin, Greek, Surgery and Physiology. Dean Kirchwey was transferred from the Nash Professorship of Law to the Kent Professorship of Law. Dr. L. Emmett Holt, Professor of the Diseases of Children, was assigned to a seat in the Medical Faculty upon the recommendation of the Faculty; and Christian A. Herter, M.D., was appointed Professor of Pharmacology and Therapeutics. Robert F. Weir, M.D., tendered his resignation as Professor of Surgery, and the same was accepted. Dr. Weir was appointed Professor of Clinical Surgery from July 1, 1903. James B. Scott, J.U.D., was appointed Professor of Law.

A large number of reappointments to the grades of instructor, tutor, assistant, and lecturer, and the following promotions and first appointments were confirmed. In *Analytical Chemistry*, Charles H. Ellard, Tutor; Hal T. Beans, Tutor; Frederick V. D. Cruser, Assistant. In *Electrical Engineering*, Thomas O'Connor Sloane, Jr., Assistant. In *English*, Harold S. Symmes, Tutor. In *Geology*, Hervey W. Shimer, Assistant in Palæontology; Alexis A. Julien, Curator. In *German*, Philipp Seiberth, Assistant. In *Greek*, Bert Hodge Hill, Tutor. In *History*, James T. Shotwell, Instructor. In *Mathematics*, Clifford Gray, Tutor; Edward A. Hook, Tutor. In *Mechanical Engineering*, Charles E. Lucke, Instructor. In *Mechanics*, Albert P. Wills, Instruc-

tor. In *Metallurgy*, Myrick N. Bolles, Tutor; John F. Thompson, Assistant. In *Oriental Languages*, William Popper, Gustav Gottheil Lecturer in Semitic Languages. In *Philosophy*, Wm. Pepperrell Montague, Lecturer; Wilmon H. Sheldon, Tutor; Percy Hughes, Assistant. In *Psychology*, Robert S. Woodworth, Instructor. In *Physics*, Charles C. Trowbridge, Instructor; Frank L. Tufts, Instructor; Bergen Davis, Tutor; William S. Day, Lecturer; Charles Forbes, Curator. In *Romance Languages*, Daniel Jordan, Instructor. Under the FACULTY OF LAW: John D. Kaps, Tutor; Jackson E. Reynolds, Lecturer; Francis C. Huntington, Lecturer.—Under the FACULTY OF MEDICINE: In *Anatomy*, William Darrach, Assistant Demonstrator. In *Gynæcology*, Frank S. Mathews, Instructor; Frank R. Oastler, Instructor; Howard C. Taylor, Instructor; Edward L'H. McGinnis, Assistant. In *Obstetrics*, James D. Voorhees, Lecturer. In *Physiology*, Russell Burton-Opitz, Instructor. In *Surgery*, Joseph A. Blake, Lecturer; George E. Brewer, Clinical Lecturer. In *Ophthalmology*, Ward A. Holden, Instructor and Chief of Clinic; Henry H. Tyson, Instructor.—In BARNARD COLLEGE: In *Botany*, Alice A. Knox, Assistant. In *Chemistry*, Marie Reimer, Lecturer; Martin A. Rosanoff, Assistant. In *Geology*, Ida H. Ogilvie, Lecturer. In *German*, Annina Perriam, Assistant. In *Greek*, Stephen A. Hurlbut, Lecturer. In *Latin*, Gertrude M. Hirst, Tutor. In *Physics*, Julia Nelson Colles, Tutor. In *Romance Languages*, Richard Thayer Holbrook,

Tutor. In *Zoölogy*, Pauline Hamilton Dederer, Assistant.

THE UNIVERSITY COUNCIL

February Meeting.—Amendments to the calendar for 1903-04, regarding days of registration, were adopted. It was resolved, also, that Lincoln's Birthday and Washington's Birthday be considered academic days upon which exercises are not suspended; and that the Easter recess, as proposed, be adopted for all Schools and Departments of the University at Morningside Heights.

The Special Committee appointed to consider and report on the celebration of the 150th anniversary of the foundation of the Corporation presented the following report:

The Committee are of opinion that the 150th anniversary of the foundation of King's College, occurring on October 31, 1904, should be suitably commemorated. In their judgment, the celebration should be strictly academic in character, and should not undertake to reproduce here the features of a social and inter-university character which so successfully marked recent similar celebrations at Princeton and Yale universities.

The Committee also submitted a tentative plan. The report of the Committee was accepted; and the plan submitted was approved in its general features.

The Special Committee appointed to draft regulations for the award of the International Fellowships for Study in France presented the following report, which, on motion, was adopted:

The Fellowships shall be officially described as the Columbia University International Fellowships for Study in France. They shall be awarded in the same manner as are the other University Fellowships.

In addition to the certificates and testimonials required of all candidates for University Fellowships, applicants for the International Fellowships must submit with their applications satisfactory evidence of their proficiency in the French language; and, other things being equal, preference shall be given to those candidates whose knowledge of French is such as to enable them thoroughly to understand the lectures delivered in the French Universities.

Any graduate of a college or scientific school may become a candidate for an International Fellowship.

All appointments shall be made for one year. Reappointments shall be considered for reasons of weight alone.

The holder of an International Fellowship may select such a course of study as he shall prefer, and may also choose the place of his residence while in France, provided, however, that when not pursuing original investigations in other parts of the country, his place of residence shall be in some city which is the seat of a university.

The holder of an International Fellowship shall report in writing from time to time, concerning the work upon which he is engaged, to the head of the department in which his especial subject lies, and, when required, to the President of the University.

The Special Committee appointed to consider and report upon the value to be assigned to Summer Session and Extension Courses, recommended the following resolutions, which, on motion, were adopted:

That Summer Session courses given by instructors of Columbia University may be counted toward the requirements of residence for the degree of Master of Arts, provided that every course so counted shall be:

(a) equivalent to a corresponding course in the Faculty of Political

Science, Faculty of Philosophy, or Faculty of Pure Science;

(b) given not less than two hours a day during a session—it being understood that the two hours here required may be made up in two one-hour courses which are closely allied and given as one course;

(c) approved in advance of its announcement by the University Council;

and provided, further, that a student may take not more than one such course during a session, and that the final examinations in all subjects for the degree shall be held only on the fulfillment of all requirements of residence.

That the total number of points allowed to be counted toward the degree of Bachelor of Arts or Bachelor of Science, for work in a single Summer Session, shall not exceed three.

That Extension Courses, to be recognized by the University, must be given by University teachers; must be integral parts of courses given in the University; and must be under the administrative supervision of the University.

That for the degree of Bachelor of Arts or Bachelor of Science there be required a residence at Columbia University of not less than one academic year, during which not less than twelve points of credit toward the degree shall be attained.

It was resolved that candidates for the degree of Doctor of Philosophy who, under paragraph 10 of the Regulations for the University Degrees, have received the degree of Master of Arts, shall be credited with one year's residence toward the degree of Doctor of Philosophy.

The resignation as representative to the Council from the Faculty of Pure Science of Professor E. B. Wilson, and the election in his stead of Professor J. F. Kemp for the remainder of the unexpired term of

three years from July 1, 1901, was reported.

April Meeting.—Rules were adopted fixing the scholarship requirements for participation in inter-collegiate athletics. [See p. 373.]

The following were appointed University Fellows for 1903-4: Leon Oliver Beatty, of New York City, in Chemistry; Frederick Columbus Blake, of Leadville, Colorado, in Physics; Mario Emilio Cosenza, of New York City, in Latin; William Harper Davis, of New York City, in Psychology; Allen Barber Eaton, of Beloit, Wisconsin, in Sociology; Harry M. Gage, of Huron, South Dakota, in Philosophy; Harold Clarke Goddard, of Worcester, Massachusetts, in English; William Frederic Hauhart, of Baldwin, Missouri, in German; Paul Leland Haworth, of Marquette, Michigan, in American History; William Titus Horne, of University Place, Nebraska, in Botany; Stephen Herbert Langdon, of New York City, in Semitics; Ralph Barlow Page, of Toronto Junction, Ontario, Canada, in European History; J. Homer Reed, of Minneapolis, Minnesota, in American History; Bert Russell, of Minneapolis, Minnesota, in Physiological Chemistry; Charles Emil Stangeland, of Minneapolis, Minnesota, in Economics; Ira A. Williams, of Ames, Iowa, in Geology; David Laforest Wing, of Boston, Massachusetts, in Statistics; and Naohidé Yatsu, of Japan, in Zoölogy.

The following were appointed alternates: Manley Benson Baker, of Stratford, Ontario, in Geology; Frederic Anson Cummings, of Spartanburg, South Carolina, in

English; Walter Fenno Dearborn, of Middletown, Connecticut, in Psychology; Robert Dale Elliott, of Lincoln, Nebraska, in Greek; Harry Theodore Johnson, of Dakota City, Nebraska, in Political Economy; Joseph Grégoire de Roulhac Hamilton, of Hillsboro, North Carolina, in American History; and Lorande Loss Woodruff, of New York City, in Zoölogy.

Honorary Fellowships were conferred upon Michael Marks Davis, of New York City, in Sociology, and William Kenneth Boyd, of New York City, in European History. Stanley Kidder Wilson, of New York City, was appointed to the Proudfit Fellowship in Letters; Walter Whipple Arnold, of Rochester, New York, to the Drisler Fellowship in Classical Philology; and Preserved Smith, of Amherst, Massachusetts, to the Schiff Fellowship in Political Science. Upon the recommendation of the Faculty of Teachers College, Anthony Henry Suzallo, of San Francisco, California, was appointed Fellow in Education; and James Edwin Addicott, of San José, California, Fellow in Manual Training. The Faculty of Teachers College was authorized to fill the vacant Fellowship in Education.

Upon nomination of the Faculty of Pure Science, Lewis I. Dublin, of New York City, was appointed John D. Jones Scholar.

The President was authorized to appoint, on behalf of the Council, such candidate for the Barnard Fellowship as may be nominated jointly by the Faculties of Columbia College, Applied Science, and Pure Science.

The President was authorized to fix the day for opening the final examinations at the College of Physicians and Surgeons in 1904, upon the understanding that the opening shall not be earlier than May 7.

FACULTY OF APPLIED SCIENCE

February Meeting.—It was voted that, so far as possible, the number of class-room exercises be so limited each day as not to extend beyond 12:30, and that exercises may be assigned to the morning of Saturday.

It was also voted that class-work in the Gymnasium be assigned to afternoon instead of morning hours.

March Meeting.—Thermodynamics (Mechanics 4) was transferred from the fourth to the third year for all engineering courses. A number of other changes in hours and courses were made in the curricula of Civil, Electrical and Mechanical Engineering.

Hereafter a student once admitted by the Committee on Admissions shall pass from the jurisdiction of the Committee, and be subject only to the Dean.

April Meeting.—A finished design for the Illig medal was approved; it was voted, however, that no award of this medal be made for the current year.

FACULTY OF POLITICAL SCIENCE

March Meeting.—On report of the Committee appointed at the February meeting to formulate a plan for the administration of the Julius Beer Lecture Fund, it was voted that the income of the Fund be allowed to accumulate and that no appointment be made for 1903-04.

The recommendation of the Committee was adopted and the Committee was continued, to draft and present regulations governing the lectureship.

April Meeting.—It was voted that, in accordance with Section 8, Chapter 3, of the University Statutes, Drs. Botsford, Johnson, Shepherd and Shotwell be invited to attend the meetings of the Faculty.

May Meeting.—In order to avoid separate examinations of candidates for the degree of Ph.D. having some of their subjects under other Faculties, it was voted that the examination of any candidate having only a minor subject under the Faculty of Political Science shall be held at the time of his examination upon his major subject, and that the representative of the Faculty of Political Science appointed by the Dean shall have power to declare, at the time of such examination, whether the candidate is proficient in such minor subject; and that when a candidate having his major subject under the Faculty of Political Science and a minor subject under another Faculty is to be examined, the Dean of the Faculty of Political Science shall notify the

Dean of the other Faculty concerned and shall request that a representative of such Faculty be sent to examine the candidate in such minor subject.

TEACHERS COLLEGE FACULTY

March Meeting.—The following courses, to be given for the first time in 1903-1904, were established: Practicum in Physical Education, by Professor Wood; Educational Problems, by President Butler, Dean Russell, and visiting lecturers; Religious Education, by Dr. Hodge; Applied Design, by Miss Hyde; Constructive Design, by Miss Rogers; Reading course in Educational German, by Professor Bagster-Collins; Teachers' reading course in Xenophon and Homer, by Professor Lodge; Teachers' reading course in Cæsar, Cicero, and Vergil, by Professor Lodge; Physical Nature Study as related to country life and agriculture, by Professor Woodhull; and Physical Nature Study as related to life in cities, by Professor Woodhull.

April Meeting.—The gift by Miss Caroline Phelps Stokes of \$5,000 for a special scholarship in Domestic Science was announced.

STUDENT LIFE

The completion of the college year has brought to a close an unusually successful season for nearly every branch of undergraduate activity.

On April 3 the **Columbia Cornell debate** was held in Carnegie Lyceum and resulted in a victory for the Columbia team. The question was "Resolved, that a method

of electing United States senators by popular vote would be preferable to the present system of election." Columbia defended the negative side of the question and was represented by J. A. Burnquist, A. G. Hays, and A. L. Strasser, with H. W. Pitkin as alternate. Professor John Bassett Moore presided at the debate. The decision was given by

a committee of judges composed of Gen. F. V. Greene, Professor G. B. Adams, and Mr. Francis B. Thurber.

On April 4 a meeting of delegates from the debating bodies of Columbia, Cornell, and Pennsylvania was held in Earl Hall and a preliminary agreement for a triangular debating league, including these three universities, was drawn up. Final and definite particulars in regard to the league are pending conclusion and the agreement will go into effect during the academic year of 1904-5. The Debating Union has concluded its agreement with the University of Michigan for two debates, one in Ann Arbor in December, 1903, and one in New York in March, 1905.

On April 24 the **Sophomore-Freshman debate** was held in Earl Hall and won by the Sophomore team, and on May 1 the intersociety debate between Philolexian and Barnard resulted in a victory for Barnard.

Students interested in the **literary life** of the university have recently organized a society whose object is to be the production and criticism of literature. The members will contribute stories, poems and essays to be read before the society, and the works of well-known authors will be studied and criticised. It is thought that the organization will be a great stimulus to literary endeavor among undergraduates. The following are the officers: President, R. C. Gaige, 1903; vice-president, W. F. J. Piel, 1905; secretary, G. A. K. Sutton, 1903; treasurer, O. R. Houston, 1904. At the last meeting Profes-

sor Woodberry gave an informal talk on the ideals of the organization.

King's Crown, under its new organization as the leading society among the undergraduates, has had a very successful season. The most important thing attempted by the Crown this year was the presentation and management of the Varsity Show. "The Mischief Maker," a comic opera by Edgar Allen Wolff, 1901, Arthur G. Hays, 1902, and Clarence J. Penney, 1901, was produced in a very creditable manner at the Carnegie Lyceum during the week of March 23. An out-of-town performance was given at Montclair. The show was one of the best ever given at Columbia, and under the management of Roi Cooper Megrue it was a financial as well as a social success. The profits amounted to about \$900.00. The Crown has also taken steps for giving awards to students who take part in activities other than athletics. Insignia in the form of watchfobs bearing the old King's Crown seal have been prepared, and a committee has been appointed to govern their award. Awards may be made to members of intercollegiate chess and debating teams, to editors-in-chief of the four undergraduate publications, and to others at the discretion of the committee. All awards have to be ratified at a meeting of the Crown.

The **Société Française** presented a very successful play in the theater of Barnard College on the evening of April 22. A one-act comedy, "L'Anglais tel qu' on le parle," by Tristan Bernard, was given with the following cast:

Eugene.....H. J. Langlés
Hogson.....J. McKeon
Inspector de Police

J. H. Marsching
Julien Cicaudel...V. de Beaumont
Garçon.....H. Banning
Agent de Police.....W. A. Tice
Betty Hogson.....G. Burns
La Caissière.....O. R. Houston

A farce, in which the two parts were taken by J. H. Marsching and O. R. Houston, was also part of the program. The glee and mandolin clubs assisted in the entertainment.

The **Deutscher Verein** has continued its record of prosperity. The meetings are always informal and full of good fellowship, and afford one of the few occasions where members of the faculty and students work together in a social way.

The year past has in general been a good one for the undergraduate publications. *Spectator* has succeeded in its attempt to furnish a students' daily newspaper, and the change from the semi-weekly form has been amply justified. On May 11 a special issue appeared in token of the twenty-fifth anniversary of the founding of the paper. The first editor-in-chief was Frederick W. Holls, '78. The *Literary Monthly*, while it has been in many ways a radical departure from old tradition, has been eminently successful. The literary character of the monthly is very creditable, and the editorials discuss problems of live interest in college affairs. *Jester* has recently completed its second year and is becoming a very excellent type of the college comic journal. *Morningside* in its latest numbers has presented a very admirable quality of light literature and is keeping well in accord with

its best traditions. The cover designs are attractive, the latest one being in two colors.

It has been announced that Dr. J. C. McCracken, who has acted as secretary of **Earl Hall** for the two years past, will not return to the university next year. Howard Richards, a graduate of Yale, and a member of the class of 1903 in the School of Applied Science, will succeed Dr. McCracken. Marcellus Hartley Dodge, 1903, has been chosen to serve as president of the Christian Association for another year.

The **classes** have been carrying out most of the traditional activities, although the seniors have neglected the custom of singing on the library steps. The college seniors held their last class dinner before graduation at the *Arena* on the evening of April 2. The annual Senior Science Ball was held in the gymnasium on May 1, and proved a very successful college affair. The members of the class who had charge of the dance were: Le-Clanché Moën, chairman; William Sage Baldwin, Alonzo Brackett Bradley, Frederick Baylis Clark, Roger Trowbridge Pelton, and John Fairfield Thompson. The Sophomores have chosen the board of editors for the 1905 *Columbian*. R. H. Bradley is editor-in-chief and N. W. Van Nostrand business manager.

D. C. B.

At a special meeting of the **English Graduate Club** on May 11, the following memorial to Professor Price was adopted:

Whereas: It has pleased Almighty God to take from us our master and

friend, Thomas Randolph Price; and

Whereas: We, the members of the English Graduate Club, bear with keen sorrow the loss of one who was to us a high and consistent example of Christian living, and a perfect type of scholarly ideals; whose relations with all men were made beautiful by the finest grace of chivalry—whose profound learning was devoted alike to the loftiest search for truth, and to the service of those who seek it most humbly; therefore be it

Resolved: That we here record our grief at his loss, and our deep sympathy with his family; and that

we express above all our gratitude to that Providence which makes known to us, in such men, the charm of goodness, and the inspiration of truth, and which showed us near at hand in him, the spirit of those who are the lights of the world in their generation. And be it further

Resolved: That a copy of these resolutions be sent to Mrs. Price, with the sincere sympathy and good wishes of the society, and that these resolutions be published in the university paper.

John Erskine,
O. B. Capen.

ATHLETICS

An event of considerable importance to our athletic interests has been the recent appointment by President Butler of a **University Committee on Athletics** to decide all cases concerning the eligibility of students to take part in the various intercollegiate sports. A committee made up of members of the faculty is retained to decide the students' standing as regards scholarship, and physical fitness will be determined by the medical director of the gymnasium. All other questions fall within the province of the new committee, which is made up of three alumni and two undergraduates, as follows: Francis S. Bangs, '78, chairman; Robert C. Cornell, '74; Reginald H. Sayre, '81; Edward B. Bruce, 1904 L.; and Donald C. Brace, 1904. The committee has formulated the following rules which are to govern eligibility, and it is thought that the new plan of control will greatly facilitate the governance of our athletic relations.

Rule 1. No one shall be allowed to represent the University in a public contest, either individually or as a member of a team or crew, unless he can satisfy the Committee that he is, and intends to be throughout the academic year, a *bona fide* member of the University, taking a full year's work.

Rule 2. No student shall be allowed to represent the University in a public athletic contest, either individually or as a member of a team or crew who, either before or since entering the University, shall have engaged for money in any athletic competition, whether for a stake, or a money prize, or a share of entrance fees or admission money; or who shall have taught or engaged in athletic exercise or sport as a means of livelihood; or who at any time shall have received for taking part in any athletic sport or contest any pecuniary gain or emolument whatever, direct or indirect, with the single exception that he may have received from his college organization, or from a permanent amateur association of which he was at the time a member, the amount by which the expenses necessarily incurred by him in representing his organization in athletic contests exceeded his ordinary expenses.

(a) The disqualification worked by this rule shall be held to include those students who receive or have received any emolument, direct or indirect, by reason of their connection with so-called "Summer Teams" or "Nines," or with such athletic clubs as are not classed by the University Committee as purely amateur associations.

(b) This rule shall be so construed as to disqualify a student who receives from any source whatever a pecuniary gain or emolument or position of profit, direct or indirect, in order to induce or enable him to participate in athletics.

Rule 3. No student shall be eligible to represent the University, either individually or as a member of a team or crew, unless he shall pay as his proper share of the training-table expenses of the team or crew of which he is a member, an amount equal to that which his board would have cost him had he not been at such training-table, and no student shall be eligible in case he owes money for his share of the training-table expenses of a previous team or crew.

Rule 4. A Freshman to be eligible must be a member of the Freshman Class of Columbia College or of the first-year class in the Schools of Applied Science or Architecture; he must be in his first year of residence, must have been in regular attendance with his class, and must not have attended another college or university in courses equivalent to any at Columbia. If a special student, he must be pursuing a course or courses requiring not less than 15 hours of work per week, of which 12 hours must be in subjects open to Freshman or first-year students.

Rule 5. No student shall represent Columbia in intercollegiate athletics for a longer period than four years in any one branch of sport, or more than four years diminished by the number of years during which he has represented another college or university in such branch of sport. In applying this rule to a student coming from another institution to Columbia

only those years are to be counted which are regarded as the equivalent of college years in Columbia.

Rule 6. A student who has ever represented another college or university in an intercollegiate contest, shall not represent Columbia in the same branch of sport until he has resided one college year at the University.

Note—In the foregoing rules the term "college" includes:

(a) All institutions authorized to confer a bachelor's degree which admits to the Sophomore Class of the larger universities.

(b) All scientific and professional schools authorized to confer an equivalent degree.

(c) The Military Academy at West Point and the Naval Academy at Annapolis.

Rule 7. A candidate for a team or crew on beginning training must fill out and file in the office of the Director of the Gymnasium, a registration blank in the form attached to these rules, countersigned by the Manager; but no Manager shall countersign the blank unless the candidate has shown a pass card from the Director's office testifying that the University rules regarding physical examination have been complied with.

Rule 8. No student shall take part in any athletic contest until he has been declared eligible by the University Committee on Athletics. An eligible list will be posted throughout the year on the Gymnasium Bulletin.

Rule 9. The schedule of each team or crew shall be filed in the office of the Director of the Gymnasium by the Manager, who shall also, not less than one week prior to a contest, file a list of the members of his proposed team or crew, including substitutes; and after such contest shall file a list of the contestants therein representing Columbia.

Rule 10. The Committee may prohibit any student from participating in athletics.

The following Scholarship Requirements for participation in in-

tercollegiate athletics were adopted by the University Council April 21, 1903:

1. No student, regular or special, who fails to perform the work of the courses taken by him to the satisfaction of the Dean of the Faculty under which he is registered, shall be eligible for any athletic team; and any student, otherwise eligible, who falls below the standard of satisfactory work set by the Dean of the Faculty under which he is registered, shall thereby forfeit his eligibility.

2. If a special student, he must take courses amounting to not less than fifteen hours per week. He must have been in the University at least one academic year, must have taken and completed courses amounting to at least fifteen hours per week during the preceding year, and must have passed examinations in subjects aggregating at least twelve hours in those courses when such were given. In the absence of required examinations he must file with the Registrar a certificate from the officer in charge of his course that he has satisfactorily fulfilled its requirements.

3. If a regular student, he must have passed satisfactory examinations in at least 80 per cent. of the work for which he was registered during the preceding year or half-year.

4. No student whose aggregate deficiencies at any time amount to more than 20 per cent. of a full year's work in the courses in which he is registered shall be eligible for any athletic team.

5. No student who has been dropped from his class or from any school or department of the University, by reason of deficiency in his studies, shall be eligible for any athletic team; nor shall any change in registration, such as from special to regular or vice versa, make an otherwise ineligible student eligible. Such student must complete an academic year's work and pass satisfactory examinations therein before he shall be deemed

to be in good standing, unless he shall, in the meantime, have been permitted by the proper authorities to regain his class.

6. No student who, by reason of probation or of deficiency in his studies, is debarred from playing on a University team shall become eligible by a change in his registration until he has passed one full academic year in the University under such new registration.

The work of the 1903 **Crews** has been progressing in an encouraging way and Coach Hanlan is well pleased with the showing made by the oarsmen thus far. The new boat-house on the Harlem river, which was purchased by subscription among the graduates and students, has been placed in position at the junction of Dyckman street and the Speedway, near 195th street. The Poughkeepsie regatta comes on June 26 this year. The Yale-Columbia Freshman race, which was rowed on Lake Whitney on May 16, was won by the Yale crew by half a length.

In the **Tennis** meet with New York University, held on the grounds of the Columbia Tennis Club, May 16, the Columbia representatives made a clean score, winning all six matches. On the same day the **Golf Team** won its first team match of the season, beating the St. Andrew's team at the latter's links near Chauncey, Westchester county, by 11 holes to 10.

The **Baseball Team** has been playing a strong game throughout the season, and the sport has aroused more interest than for several years. Manager Hendrickson provided an excellent schedule, with a number of prominent contests on the home grounds. The team suffered defeat by Yale at

New Haven on April 22, but has retrieved itself by later victories, especially the one over Cornell on May 15. The scores of the games played thus far are as follows:

Columbia	24—St. Francis Xavier	3
"	14—Brooklyn Poly-technic	1
"	6—Murray Hill (professional)	1
"	2—Fordham	8
"	3—Illion (New York State League)	1
"	12—Williams	3
"	4—Illion (New York State League)	3
"	3—Yale	13
"	7—Lehigh	4
"	18—Dickinson	4
"	2—Syracuse	4
"	28—Union	7
"	1—Pennsylvania	2
"	13—Englewood Field Club	6
"	11—West Point	6
"	2—Cornell	0

The **Lacrosse Team** has been playing in excellent form all the season, and shows greater strength than for a number of years. At the opening of the schedule the team was defeated by the champion team of the Crescent A. C. by a small score. The first game of the inter-university series played on South Field against Pennsylvania on May 2 resulted in a victory by the score of 3 to 2, and the second game of the series, also played on South Field, against Cornell, was won by Columbia by the score of 5 to 1.

The **Track Team** held the annual university championship games

on South Field on April 29. Although there are few veterans on the team this year, the new men showed up remarkably well and three university records were broken, in the half-mile, two-mile and shot-put. The first dual track meet of the season was held with Pennsylvania at Philadelphia on May 8, and resulted in a victory for Pennsylvania by the close score of 64 to 49. The dual meet held with Princeton on South Field, May 16, was won by Columbia by a score of 58½ to 45½.

The **Gym Team** won the intercollegiate championship in the contests held at New York University on March 27, with Yale in second place. Columbia scored 25 points to Yale's 13. This makes the record even between the two universities, each having won twice.

In the intercollegiate **Fencing** championships held late in March, Columbia won second place, with West Point first. The work of the fencers was excellent, and F. B. Clark tied Breckenridge, of West Point, for the individual championship, each winning thirteen out of fifteen bouts.

The **Water Polo** and **Swimming Teams** have completed a victorious season. At the sportsman's show at Cleveland early in April, the water polo team again won the intercollegiate championship. On April 24 a carnival was held in the gymnasium in conjunction with the University of Pennsylvania, Columbia winning both the relay race and the water polo contest.

D. C. B.

THE ALUMNI

Class of 1878, College

The Class of '78 held its twenty-fifth anniversary dinner at the University Club on April 18. '78 has lost heavily by deaths since graduating, but nearly two thirds of the class came together, namely: Bangs, E. M. Bliven, W. W. Bliven, H. L. Bogert, Booth, Brouwer, Curtis, Gregory, Hoffman, Holls, Hopkins, Hurlburt, Kent, Kenyon, Pryor, Rhineland, Russell, Spalding and Williams.

Bogert had composed a Latin menu and endeavored to make the class pass an examination on it, but the preparations had been too short. Williams spoke feelingly of the deceased men of the class who had left a strong impression on their friends, naming especially Low, Cushman and Cheesman, of whom Cushman was for some years instructor in the University. Informal and unconventional addresses were made by the other members of the class and a fitting class song, composed for the anniversary by Spalding, was sung by E. M. Bliven and an unselected chorus. Before adjourning, the class exercised its privilege of naming a Grand Marshal for the ensuing Commencement, and elected William H. Russell to that office.

Class of 1888, College

The usual reunion was held on the afternoon of Commencement Day in Room 305, College Hall, and the Nineteenth Annual Dinner took place at Browne's Chop House on the evening of January 15, 1903.

The efforts of the Dinner Committee were rewarded by a large attendance, and among those present were Louis Ogden and Milton Oppenheimer, whom many of the class had not seen since Freshman year. During the evening it was voted to raise a Class Memorial Fund "to be given to the Trustees for such purpose as the class may determine when the sum of \$2,000 has been collected." The raising of this fund has been entrusted to a special committee consisting of Ewing, Goeller, Powell, Sloan, Sutphen, Woodward, and Young.—Baldwin was married in June, 1902, and spent the summer in California, having charge of some of the work in the Summer School at Berkeley.—Aitken was married in February, 1903, and among other recruits to the ranks of the married men are Merriam, Putnam, and Ogden.—The children of the class continue to increase in numbers. Baldwin had a son born on March 30, Robinson has a son also, and Putnam has two, while Merriam and Sutphen have each had a little daughter added to their family.—Among our teachers, Prince is now Professor of Semitic Languages at Columbia, Sill is Professor of History at Cornell, and Woodward has just been advanced to a full professorship at Barnard.—Goeller has moved to New York and now resides at 239 West 103d Street.—Gerald West, D.D.S., has opened an office at 170 West 85th Street.—Putnam was in New York last June on a visit for the first time in many

years.—The class has suffered a severe loss in the death of Willard Humphreys at his home in Princeton, N. J., last September.—Among our non-graduates, Baker is a lawyer at 100 Highland Avenue, Ossining; Caesar is in the banking business at Tacoma; Duffie resides at Litchfield, Conn.; Oppenheimer is in the real estate business at 206 Broadway; and A. Wiener is a physician in New York City.—The class secretary, William R. Powell, 467 Fifth Avenue, would like information about William Lincoln Elmer. He is the one man among those ever connected with the class with whom the officers are not at present in touch.

Class of 1898, College

M. K. Averill was married to Miss Mabel Palmer on April 23.—Dr. Lucius Bulkley is at the City Hospital.—W. W. Comstock has resigned from the Department of Physics in the University and is now with Messrs. Willyoung & Co.—L. D. Einstein, who is now traveling in Spain, has recently published a book through the Columbia University Press, entitled the "Italian Renaissance in England." He is also editor-in-chief of an important series, entitled "The Humanist's Library."—H. L. Haas has recently entered into a law partnership with David Bandler, '92.—Ernst Lemcke will be in charge of the Columbia University Press book-store next year, the contract for the book-store having been turned over to the firm of which his father is a member, Messrs. Lemcke & Buechner.—J. F. B. Mitchell, Jr., is now with Redman, Kerr & Co., Bankers.—W. B. Symmes, Jr., with Messrs. Davis

& Schreiber, has recently formed the law firm of Davis, Schreiber & Symmes.—Franklin Zeiger is registered in the School of Philosophy this year, and is completing his work for the degree of Ph.D.

Class of 1899, College

The activity of the Class of '99 has continued throughout the year. The class held its third reunion for the present season, which was its fourth annual reunion since graduation, on Friday evening, December 26, 1902, at the Hofbräu House, Broadway. The attendance at the dinner was exceptional, fifty per cent. of the members who graduated being present. Those who participated in the thoroughly enjoyable dinner included Ehret, Hellman, Fowler, Hopkins, Mosen-thal, Sherer, Marcus, Hackett, Wormser, Ernst, Baker, Pell, Cardozo, T. Parsons, Eldert, Fort, Tuttle, Zinsser, Giffin, Josephthal, Hinck, Harrison, Simpson, Cole, Lesem, and Mitchel.

During the evening a class meeting was held, in the course of which announcement was made of the collection of a fund for the old janitor of the College, "Dean" Singer, which amounted in all to \$99. It was presented to Singer, together with abundant material for a Christmas dinner on December 24, 1902, by Cardozo, Hackett and Wormser. Singer was deeply affected by these substantial tokens of the regard in which he is held by many of the Alumni who have appreciated his large-heartedness. His thanks were very real; and he expressed the wish that his gratitude be made known to all those who remember him.

The class also decided to publish a "class letter," and appointed a committee of three for that purpose. It is proposed to make this a regular feature annually.

The memorial fund of the class was a subject of much discussion; and at a subscription taken at the reunion, the sum of \$260 was raised. The Trustees of the fund were authorized at their discretion to devote \$500 towards a fund for College Hall.

The next assembly of '99 is scheduled for the afternoon and evening of Commencement Day, 1903. The class will meet at the Alumni luncheon and hold a reunion in College Hall in the afternoon. The annual commencement banquet will take place in the evening.

Some of the happenings of the members of the class are of interest. Hinck was married to Miss Anna Moller of Brooklyn on the evening of December 30, 1902; Bradley was married to Miss Grace Goodrich of Cincinnati, Ohio, on April 29, 1903; and Hellman will be married to Miss Hilda M. Josephthal of this city early in June. Vague rumor has reports of still others who are to join the class benedicts, T. Parsons, Moran, and Seward.—The lawyers of the class are many. Mitchel, Fort, Tuttle, McCann, Eldert, Cardozo, T. Parsons, Baker, Josephthal, Seward, Harrington, Marcus, and Miller, who graduated last June from Harvard with the LL.B. degree, are all actively engaged in the practice of their profession in this city.—Kellogg is practising at Ogdensburgh, New York.—Matthew

is teaching in the Morristown High School in New Jersey; Van Name is instructor in a Brooklyn High School; Bradley holds an important position in the McClure Publishing Co.; Hopkins is a fire insurance inspector and Simpson is in the life insurance business.—Fowler, who is now a member of the firm of A. A. Fowler & Co., is also the youngest director in the Van Norden Trust Company.—Lichtenstein and Pell are the '99 representatives in Wall Street; Giffin is with the Central Realty and Trust Co. and Sherer is located in a large bank.—Ernst has been active in settlement and newspaper work; Hackett and Ropes are with Henry Holt & Co.; Harrison is still at the University working for the degree of Doctor of Philosophy.—Geoffrey Parsons graduates from the law school in June; Wormser receives the degree of Civil Engineer, and Mosenthal, Zinsser, and Lesem graduate from the School of Medicine.

E. A. C.

Washington Alumni Association

The first annual dinner of the Alumni Association of Columbia University, in the District of Columbia, was held on January 31 in the ball room of the New Willard. The association was formed a year ago, and since that time has held a number of enthusiastic meetings. The officers of the society are: President, John Cropper; vice presidents, R. F. Shepard, representing Columbia College, F. E. Leupp, the School of Law, Dr. L. W. Glazebrook, the School of Medicine, Bailey Willis, the Schools of Science; secretary, George O. Tot-

ten, jr.; treasurer, Dr. Marcus Benjamin. The Rev. Henry Yates Satterlee, Bishop of Washington, invoked the blessing. Dr. C. F. Chandler spoke upon the progress of the university, and of the founding of the School of Mines. Dr. Gallaudet, president of Gallaudet College, and a guest of the association, was the next speaker. He spoke of the sister universities, drew some comparisons, and lauded the work of Columbia. Mr. Herbert Putnam, of the Library of Congress, talked in an interesting vein of libraries in connection with universities in America. He made reference to the library owned by Columbia University and said it was one of the foremost in the country and the home of it one of the handsomest buildings in the world. Dr. Wiley, of the Department of Agriculture, an honorary guest of the association, spoke in behalf of fair Harvard, and upon the practical work of a philosopher and scientist. The navy was represented by Capt. Charles D. Sigbee, who told of the fine scientific work done by the schools of science of Columbia. Prof. W. R. Ware, professor of architecture at Columbia, who was in the Capital City as one of a jury on the decision of a competition for a Memorial Continental Hall, Daughters of the American Revolution, was present as a guest, and made some interesting remarks. The last speaker, Mr. William Dudley Foulk, Civil Service Commissioner, responded to the salutatory remarks of Dr. Chandler. The dinner was a complete success in all particulars.

Colorado Alumni Association

The eighth annual meeting of the Alumni Association of Columbia University in Colorado was held at the University Club, Denver, on February 7, and was attended by 23 members. The following officers were elected for the ensuing year: William Van D. Hodges, Law, '99, President; Walter A. Jayne, P. & S., '75, Vice-President; James D. Benedict, Law, '99, Secretary and Treasurer.

California Alumni Association

The third reunion of this association was held at the University Club, San Francisco, on January 31, 1903, with the following members present: Swan, McLean, Sherman, Wedekind, Lewitt, Watkins, Margolis, Friedlander, Engelhardt, Aitken, Eickhoff, Kahn, Frank, Prindle, Carpenter, Stevens, Nelliss, de Ruyter, and Spencer. The report of the Secretary, which was presented at the meeting preceding the dinner, showed a membership of 60, out of a list of 177, in the territory covered by the organization.

Alumni Society of the Sloane Maternity Hospital

Two scientific meetings of the society were held during the year, both of which were well attended. The paper of the first meeting was presented by Dr. S. W. Brickner, that of the second by Dr. F. A. Dorman; the discussion that followed both papers was interesting and instructive and very generally participated in. The annual dinner of the society took place on April 24 at the University Club.



THE GREEN
VIEW OF UNIVERSITY HALL FROM THE EAST

COLUMBIA

UNIVERSITY QUARTERLY

VOL. V — SEPTEMBER, 1903 — No. 4

THE QUESTION OF EDUCATED YOUTH

BACCALAUREATE SERMON, JUNE 7, 1903

"The young man saith unto him, All these things have I observed; what lack I yet?" Matt. 19, 20.

THIS question was the question of an accomplished young man. He was well born, well bred, well trained; he was of clean and honorable life and he was rich. He was distinguished in his generation for personal attractiveness, for social rank, for wealth, for intellectual power and attainment, and he stood touched, far more than he knew, with the grace of infinite aspiration. "All these things have I observed"; there is the consciousness of uncommon attainment. "What lack I yet?"; there is the dim sense of the infinite.

What did this youth mean by this question? Was he shyly seeking praise, modestly begging a compliment? Was he silently assuming that he had attained to the full measure of a man? And, considering that he had kept the commandments from the dawn of moral life in his soul, that he was strong and accomplished in spirit, that he had the power to inspire the admiration and love of Jesus, did he not have a right to conclude that his education was ended, and that he was indeed

a finished product? Was he not justified in assuming that he was now done with all drill and discipline, that he was ready for the peace that flows like a river? He had sowed to the spirit. Henceforth might he not hope to reap life in all its fullness? Would it be altogether strange if, when he put his question to Jesus, *What lack I yet?* he confidently anticipated some such reply as this: *Nothing; absolutely nothing!*

There is a tradition, which may be a slander, that the attitude toward the future of the educated youth to-day is not unlike that of the young Jewish ruler. Think of the years of discipline that lie behind you; recall the thousands of your generation that you have left below the horizon; reflect upon the intellectual habits that you have formed and the knowledge that you have gained; consider the enthusiasm for excellence that you have cultivated, and the substantial prizes that you have won; look at the manhood that you have maintained. Think of the esteem of your teachers for you, the pride of your parents in you, the expectation of your friends from you, the prophecies made concerning you by all who really know you. In asking, at this season, *What lack I yet?* is it not reasonable to anticipate that the answer will be, *Nothing*, or next to nothing? With the high witness to your worth in the diploma of your college, you will have—will you not—the right to compel the world to recognize your power and to honor it with suitable rewards?

It might be unjust to say that the educated youth does not deserve this, but it is safe to assume that probably the world will not rush to the recognition of his worth. The world is a stolid, skeptical, obstinate, unsurrendering world. We may take it for granted that it will resist our claims as long as it can. It has had a long experience with educated youth, and it has grown less susceptible. We may conclude that the educated youth is right, and that the world is all wrong. We may conclude that the world is unsympathetic, unprophetic, hard.

There is here, however, some reason for hesitation. Is it

not strange that this Jewish youth could stand in the presence of Jesus and still ask the question, What lack I yet. Here is the sublime personality of Jesus. Living and working in it are his mind, his heart, his character. Here he is in sovereign fellowship with earth and heaven, his soul in sympathy with all goodness, actual and ideal, historic, contemporary and future. What a transcendent being is here. What a mystery of majesty and loveliness is before the young ruler; and yet in the blaze of this blinding splendor he can ask, What lack I yet? If Jesus is to tell him the truth, what must his answer be to that question? Must he not reply, Everything, everything?

Here is the educated young man of to-day in the presence of the great world. Look at the wonder of its material achievement. How immeasurable is this single and lowest aspect of our human world! Look at the intellectual, the artistic, the moral, the religious aspects of man's achievement. Look at the ideal life of the race, historic, present, future; and under the shadow of this greatness let one ask the question, What lack I yet? Must not the answer be in all seriousness, Everything? You are just about ready to enter upon this mighty racial inheritance. The duty and the privilege of your manhood you are only approaching. Your career of insight and conquest is only beginning. The eaglet brooded by its royal mother, safely hatched, carefully fed, fully feathered, skilfully trained to the swallow flights that befit its tender age, must not ask of the parent eagle, What lack I yet? From the parent bird that has circled for twenty summers in the clear upper air, that has seen sunrise and sunset from above the summits of great mountains, that has looked upon the broad river as if a white ribbon had been laid upon the green robe of nature, that has beheld the sea in its fury shrink into a thing that crawls, that has widened its horizons into a sense of the vastness of the world and the immeasurable reach of the sky—from that old, audacious, exploring bird, home from its widest outlook and its most daring flight, if asked, What

lack I yet? would surely come the answer, Everything. So must answer the maturest and the greatest mind. The infinite is under and over and round about us. The world of men, and the world of God in it and around it, are infinite in reach and in richness.

Here, I think, we have the sane mood for educated youth. Before it is an infinite opportunity. The greatness of existence lies in the future. All present achievement is something on its own account; it is of yet more account as preparation for the infinitely greater achievement to come. The fundamental thing is the sense of the infinite world of men in which for us the Eternal God lives and declares His character. The vision of humanity's ideal treasure, and the longing to fulfil individual existence through fellowship with the race at its best, I regard as the sane mood for man.

I. There is first of all fellowship with the ideal life of humanity through religious belief. It is a great thing to believe in the Highest. A temple in the understanding is a vast comfort. Jesus conducted his disciples to faith. An apostle speaks to those "who through him believe in God." The crack of the gun scatters on the wing the pigeons that you have trained to eat from your hand. The brave and faithful dog stands closer to you, perhaps runs in between you and suspected danger. The crisis in experience dissipates into thin air the mere assemblage of thoughts that you occasionally entertain; the intellectual conviction, the rooted belief abides.

One may refuse to adopt the particular creed of the Christian Church, one may not care for the elaborate detail of belief, one may object to much in the form of faith, and yet be able to join in the essential affirmation. There is a vast soul in the formal belief of Christendom. The existence of a moral Deity, a moral nature in man, a moral order in human history, a moral order in the universe, and the fulfilment of life, individual and social, in God, are the great things of faith. Something like this lives in all the creeds, survives all crises of thought, persists in the sane intelligence of man.

Something like this is the permanent soul in the heart of all the changing forms of Christian faith. The alternatives are few and simple. It is either God or no God; it is either God knowable or unknowable; it is either human history a chastened and yet a vast hope or an infinite despair; it is either individual existence a possession over which one should give thanks or utter the sense of calamity. When the question of the affirmative mood and the negative is thus reduced to its final terms, they are few indeed who are unable to join the fellowship of an affirmative humanity.

It must not be overlooked that the race on the whole, and in all forms of intellectual power, is a believing race. Your relation is to a race that doubts that it may gain a deeper insight, that surrenders a lower belief for a higher, that dissipates superstition by resolving it into its ideal meanings. On the whole, you belong to a race that falls to rise again, that is baffled to fight better, that sleeps to wake, that

In the bustle of man's work time
Greets the unseen with a cheer!

The best thought, the best poetry, the best art, the supreme intellectual life of man in all its forms is penetrated with faith in the universe. The vision of God is the beatitude into which the profoundest thinkers, the loftiest poets, the noblest reformers and the greatest prophets rise. Here Plato stands with Isaiah, Spinoza with Dante, Luther with Paul, Lincoln with Edwards. To share that vision, that belief, is to enter upon the highest education, that which comes through fellowship with the monumental minds of the race.

There is no profit in permanent isolation. Isolation may indeed be decreed for a man by his inability to get at the reality in faith. Still I am inclined to think that the mightiest argument against atheism is that it presumes the human race in its supreme creative representatives to be wrong; that it takes the position of Athanasius against the world in behalf of a negation. It is indeed possible that the individual radical denier may be right, and that the race in its radical belief may

be wrong; but this is not likely. Humanity is great. It is great in its instincts, great in the gravitation of its mind toward positive faith, great in its conservation of the forces that make it an achieving and an ascending humanity. Contradictions of humanity we all are bound to make here and there, in this opinion and in that, in the form of belief and in behalf of the soul of belief; but I confess that there seems to me to be something tremendous in the attitude of the man who meets the whole higher mind of the race with a permanent and an absolute negation.

Jesus Christ is here the guide for the reforming intellect of the new generation. He entered into the soul of the religious belief of his people. He lived and moved and had his being in the greater beliefs of his race. He found them wanting. He found them at their best imperfect. He gave to them not a negation, but a mighty fulfilment. He took the position of sympathy with the believing intellect of his people; he accepted as his own the ideal cherished by his nation, and he embodied it in imperishable words. He conceived it to be his task to render the faith of his race into vaster forms, to give to their ideal consummate expression. The result is that Jesus, the founder of the kingdom of love, is the conserver of the kingdom of law, that the author of Christianity is the saviour of Hebraism, that the New Testament has been the perpetuator of the Old Testament.

Educated men cannot afford to stand off from the religious belief of the nation. The fruitful, the creative impulse is there. The sources of high intellectual power are there. Isolation from the believing mind of the nation means sterility. Nothing great can come of any individual mind that lightly disregards the essential inheritance of faith. It may not be possible to agree with the faith as a whole; but it is possible to think in profound and venerative sympathy with the soul of inherited belief. Join, in this way, the vast fellowship of believing minds, and through it reach the open fountains of intellectual life. Conspire with the deepest mind

of the people; take their belief out of its crudeness, out of its provincialness, out of its barren formalism; think in reverent sympathy with the great ultimate and imperishable ideas in that belief; work with the purpose of giving new clearness and splendor to the loftiest thought of the nation; die having, in this fellowship, lived with the sublimest intelligence of mankind, having lived with the intelligence of Jesus Christ and, in the supreme moments of existence, having risen to the vision of God.

II. While, in my judgment, belief is essential to the permanence of a wholesome and reasonable religion, we must not forget that religion itself is chiefly a profound sentiment. It is largely a condition of the affectional nature, a mood of the spirit. It is this not in an individual way, but with reference to an exalted standard. It is sympathy with humanity in its highest moods of regret and grief over moral failure, of quenchless aspiration after personal worth, of trust in the Infinite, of love and delight and hope in the presence of God, of reconciliation to the order of the universe, of peace in the Eternal will.

Again, fellowship with the heart of humanity means life. Look, for example, into the greater literature of the world. What is the last and greatest excellence of Platonism? Fundamental sympathy with the whole higher feeling of Plato's race. Below the arguments of the *Phaedo* in behalf of immortality there is the vast and reverent appreciation of human life; beneath the idealism of the *Republic* there is sympathy with the contradicted desire and the disappointed hope of the Greek heart. Wherein lies the greatness of the Greek tragedians? In their sympathy. Again, it is genius working in essential sympathy with Greek feeling. In the pure intellectualism of Aristotle this radical sympathy is a constant element, always under control, always subject to criticism, but always there as the life of the intellectual movement. Even Thucydides so far transcends his sad positivism that he works at his great task with a Greek heart. He speaks for Greek

manhood when he says: "We must do what men may, and bear what men must." The fact is that the treasure of thought for philosopher and artist and historian is in the soul of the people, and without fundamental sympathy that treasure cannot be reached. What is the meaning of a great negative thinker like Hume? He is a sign-post at the fork of the roads, telling humanity with its treasure that this is not the way home. Does he see man's treasure? No. Does he persuade man that he is without treasure? No. He is pressed into the service, the negative service, of the race that is conscious of its treasure.

Look into English literature. Shakspeare is in fundamental sympathy with the English race; he is in fundamental sympathy with humanity. The same remark is true, in one degree or another, of Chaucer, Spencer, Milton, Wordsworth, Tennyson and Browning, of Bacon and Burke, of Johnson and Carlyle. Does not the measure of this radical sympathy determine the measure of greatness? And if we include philosophers in our survey, do they not, as a guild and with rare exceptions, in so far as they are builders, in so far as they are constructive thinkers, in so far as they are the conscientious expositors of the meaning of the human world—do they not work in sympathy with the great instincts of mankind?

Two great examples from the literature of the world further confirm my contention. The chief note in Dante's poem is its sympathy with the religious mood. After all its discredited knowledge, its outgrown opinion, its incredible belief and its unacceptable thought have been ruled out, there remains in that poem a monumental witness to the highest mood of the human spirit. Religion made that work immortal; religious sympathy, the passion that joined the poet in fellowship with the sovereign mood of his race, made Dante an imperishable name. The poetic gift is there, but that is not the final thing. The magic of musical utterance is there, but the secret of Dante's charm lies deeper. The soul of religious sympathy lives in him, and turns him into a voice for ten silent centuries. With

even greater emphasis must this be said of that wonder of Semitic literature—the book of Job. The secret of its eloquence wide-rolling like the sea when the tempest is upon it, of its pathos deep as the heart of humanity, of its beauty purer and loftier than the stars, of its courage fearless as becomes the lover and servant of truth, of its sense of the incompleteness, the suffering and the mystery of existence, is the soul of religious sympathy which it enshrines. The nameless man who wrote it lived in the life of a race, moved in the existence of a whole human world, joined himself through sympathy to the sovereign mood of man and thus spoke and wrote and sang.

To fall out of this mood of sympathy with the lovers of God and of men, to become alienated from the highest feelings of our kind, to lose the sense of the awful beauty of existence, to quench the impulse to worship, to cease to grieve with the race in the depths, to be unable to join in its *de profundis*, to refuse to rejoice with it on the heights and to fail to respond to its vast *sursum corda*, is nothing less than a calamity. Education fails woefully when it takes a man out of the best belief of his race; it fails still more woefully when it takes him out of the best feelings of his race. Education is nothing but the process whereby the individual is carried into the higher intelligence and the nobler spirit of mankind; and it is but just that the mass of men should expect from educated youth a purer faith and a deeper and devouter heart.

III. Religious belief should complete itself in religious feeling, and religious feeling should perfect itself in religious service. The soul of all true living, for the individual, is in insight into the world's supreme faith and in sympathy with the world's supreme passion and in devotion to the world's supreme ideal. It cannot be too often said that the individual apart from his kind is nothing. I repeat that we are bound to contradict our race at many points; but I contend that our contradictions, when they are wise, are in the interest of the larger fulfilment of the life of the race. Radical contradiction

of the race in its wisest thought, in its deepest feelings and in its highest aims is, for the man who makes it, suicidal. Outside the circle of a believing, loving and serving humanity there is no life proper for man. There is only death.

The physical work of the world has, I believe, an immense moral value. The larger part of all the worth that men possess they gain from the affections of home and from the work that supports the home. Work itself is for the intellect and for the character a vast and a precious discipline. An idle world I doubt if even God could carry into honor. An idle world would be nearly a hopeless world. I think we have learned from Kipling at this point an unforgettable lesson. He has chosen for his art a hard, an unpromising subject. He has chosen, in army and in navy and in the coarser work of man, a difficult field. Yet he has succeeded. He has shown us, in camp, in barracks and on the battlefield, the predominance of a genuine altruism; he has shown us, in the men who control the flying shuttles in the growing web of empire, a sense of duty, a sense of brotherhood and a self-forgetfulness that are nothing less than the saving grace of the Most High. Gunga Din bears his representative and telling witness:

With 'is mussick on 'is back,
'E would skip with our attack,
An' watch us till the bugles made "Retire,"
An' for all 'is dirty 'ide,
'E was white, clear white, inside,
When 'e went to tend the wounded under fire.

McAndrews' hymn comes up from the great engine room of the world:

Yon orchestra sublime
Whaurto—uplifted like the just—the tailrods mark the time.
The crank-throws give the double-bass; the feed-pump sobs an' heaves;
An' now the main eccentrics start their quarrel on the sheaves. . . .
They're all awa! True beat, full power, the clangin' chorus goes
Clear to the tunnel where they sit, my purrin' dynamos.
Interdependence absolute, foreseen, ordained, decreed
To work, ye'll note, at any tilt an' every rate o' speed.
Fra skylight-lift to furnace bars, backed, bolted, braced and stayed,
An' singin' like the Mornin' Stars for joy that they are made. . . .

Now, a' together, hear them lift their lesson—theirs and mine:
Law, Orrder, Duty an' Restraint, Obedience, Discipline.

That is the idealism in the heart of the world's mechanism; that is the idealism in the vision of which brave men plough and sow and stand at the physical task of existence. That vision of law, order, duty, restraint, obedience, discipline the educated youth must behold in the heart of the world's toil. That vision he must catch as he shares in the solution of the vast and imperative food problem.

The food problem is much, but it is not all. Man cannot live by bread alone. Ideal interests are the supreme concern of man; ideal satisfactions are his chief joy. These ideal interests are embodied in the great name of religion. And servants of these ideal interests, as thus embodied, all educated men should be. Everything depends finally upon the character of our people. The character of the people is in the permanent interests of our people. Let these be wholly or mainly commercial, and our democracy, our humanity is gone. Let these be chiefly materialistic, and the ideal life of the race counts for nothing. Say what we will, the fate of nations is bound up with the interests that they cherish. If these are high, nations may hope to endure; if these are low, nations cannot last. Religion is not, therefore, the merely personal matter, the wholly private affair that it is often represented to be. It is supreme solicitude for the public well-being; it is insight and passion and devotion in accord with that solicitude. We believe and feel and act on our own account, and because of the appeal which the truth makes to us. But we are Americans. And we believe with a believing nation, we feel with a feeling nation, we stand in the strength of a public devotion.

For the ideal life of the nation, more than any other single institution, the Church stands. The nation cannot dispense with the Christian Church and endure. The reason, the feelings and the wills of individuals need the vast chastening in faith which the Church alone can give. Let the Church,

therefore, not be forsaken by educated youth. Let it not be left desolate in the absence of the gifted and strong. Let it be crowded and controlled by the new vision and the fresh enthusiasm of our finest youth. If it is beneath the level of its proper life, do not abandon it, any more than you would abandon your country. Enter it, lift it to its highest level, redeem it to its supreme uses, as you enter your country through citizenship to cleanse, exalt, and continue her existence. Hear in the song of the prophet the religion of to-day: "We have a strong city; salvation will He appoint for walls and bulwarks. Open ye the gates that the righteous nation which keepeth faith may enter in." The gates of the future are open; only the righteous nation which keepeth faith can live to enter in. Do your best to form in righteousness the character of your nation that it may command the future.

Jesus Christ, looking upon the young ruler, loved him. He spoke to him the great words, Come, follow me! Think of that invitation. Here is that sublime intelligence, that glorious heart, that chastening and recreating will, that personality of utter majesty and grace. Fellowship with that Master meant everything then; it means everything now. That sovereign person is in the highest thought, in the noblest feeling, in the best work of mankind. Jesus Christ is the Master of the ideal life of men. We sell all that would keep us from joining him, we surrender all that would forbid to us the privilege of his fellowship. We look at him and we see that the horror of existence is rebellion against man, falsehood to the deepest in our race, contempt of the divine spirit in our kind, blasphemy against the kingdom of love in human history. The beatitude of individual existence is to believe and feel and serve with an advancing, an improving, a Christ-following, a God-guided humanity. Live your lives, I beseech you, in the faith and love and service of your race at its best; figure your destiny in the ideal life of mankind. Follow Christ into the sacrificial heart of man, and there dwell face to face with God.

GEORGE A. GORDON

COMMENCEMENT DAY, 1903

THE one hundred and forty-ninth year of the old College, and the eighth in which Columbia has borne the name of University, closed with the commencement exercises held on Wednesday morning, the tenth of June. The candidates for degrees, the teaching force, the guests of the University, the officers of the alumni association, the Trustees of Teachers and Barnard Colleges, the University Council, the candidates for honorary degrees, and the Trustees of the University, assembled as usual in the Library and marched in the order indicated to the gymnasium. The overcast and threatening sky rendered the temperature unusually tolerable, and the rain was fortunately postponed until afternoon.

President Butler addressed the candidates for degrees as follows :

Columbia University parts to-day with another goodly company of her sons and daughters. Regret and expectancy are, I doubt not, the feelings uppermost in your minds; hope and confidence are those which the University cherishes for you. Your presence here is a mark that you have done what has been asked of you academically, and the future lies with you alone.

Let me lay stress for a moment or two upon the point of view from which your work in life is to be approached. There is, I feel sure, neither happiness nor usefulness to be found in cultivating indifference, cynicism or pessimism. There are those who feel that the educated youth of our land are apt to hold themselves aloof from popular interests and movements, and to view from one side, or from above, the active life of our democracy. This impression is not, I think, a just one; at all events, it is certainly less well-founded now than ever before; but such foundation as it has should be rudely taken from it by your efforts and by your careers. If education and training are to unfit men, mentally, for sympathetic participation in the every-day life of the nation, then the less of education and training that we have, the better. In that case we are starving the

soul to feed the mind. But the education of to-day is not of that sort. It is insistent in its demands for practical application, for service, for human sympathy. It implies faith in God and in man, and joyous participation in human efforts.

There is no true life-gospel but the gospel of hope, the gospel of belief; not that all is as right as it can be, but that all is righteous and can be made more righteous still. Carl Hilty, in his charming essay on Happiness, has truly said that "Pessimism as a permanent habit of mind is, for the most part, only a mantle of philosophy through which, when it is thrown back, there looks out the face of vanity—a vanity which is never satisfied and which withholds one forever from a contented mind." The vain, the self-centered man is at bottom a cynic, for even his own self-satisfaction is not perfect.

This University would put upon its graduates the stamp of earnestness, not paltering; of enthusiasm, not indifference; of hope and cheerfulness, not despair and gloom; of active interest in our fellow-men, and not supercilious contempt for them and their affairs. Do not fear to be in earnest, and pay no heed to the whisper that it is "bad form" to be enthusiastic. Be human; be real.

Nearly forty years ago, Thomas Carlyle made a famous address to the students of Edinburgh as Lord Rector of the University. It abounded in wisdom and common sense, and its advice to the Edinburgh students is comprised in the one sentence: Be diligent. But Carlyle went on to tell what he meant by diligence. It included, he said, all virtues that a student can have, all those qualities of conduct that lead on to the acquirement of real instruction and improvement. Most of all, it included honesty, intellectual as well as moral honesty. "A dishonest man cannot do anything real." That is a fine sentence and a true one; it may be paraphrased by saying that character makes knowledge worth while. I would rather have this great company of students face the world with cheerfulness and hope and with complete honesty, than endowed in any other way.

You go out to-day from under the shadow of a great tradition. For nearly a century and a half it has been slowly forming. Lives without number have been built into it. The years have crowned it with power and with beauty. It is a branch of

something far older, that runs back till it loses itself in the beginnings of things. It marks the rise and dominance of the human spirit. Here you have come under its influence; here you have caught something of its meaning.

May you, each in his own way, be a bearer of the tradition which you have come to know. May you all find usefulness and, if it be God's will, happiness also. Mere success, as the world judges success by outward signs, I pass by. It is not worth having save as an incident to usefulness.

The candidates for the degree of bachelor of arts from Columbia College and from Barnard College were presented by Dean Van Amringe and by Dean Gill respectively; for the degree of bachelor of laws by Dean Kirchwey; for that of doctor of medicine by Professor Curtis; for the technical degrees in the Schools of Applied Science by Dean Hutton; for the degree of bachelor of science in architecture by Professor Ware; for the same degree in education and for the various diplomas in Teachers College by Professor David Eugene Smith; for the degrees of master of laws, master of arts and doctor of philosophy by Professor William H. Carpenter, secretary of the University Council. The candidates for the collegiate degree in arts numbered 148; for the professional and technical degrees and diplomas, 524; for the university degrees, 187. The total number of degrees and diplomas awarded in course was 859. As has been usual of late years, each of the several bodies of candidates rose for presentation and remained standing while the degrees were conferred. Only the doctors of philosophy, 39 in number, were ushered upon the stage.

Eight candidates were presented for honorary degrees.* In introducing the first of these, John Britton Cauldwell, Professor Hamlin said:

* On the commencement programme appeared also, as a matter of record, the name of President Draper, of the University of Illinois, upon whom the degree of LL.D. was conferred February 2, 1903. See COLUMBIA UNIVERSITY QUARTERLY, March, 1903 (Vol. 5, No. 2), p. 205.

In that brilliant display of the world's modern art which filled the aisles of the Grand Palais at the Paris Exposition of 1900, the works of American artists occupied a conspicuous and honorable place. The critics and connoisseurs of the old world were delighted and amazed at the freshness and vitality, the power and the charm of this new-world art, and their verdict was attested by awards more numerous and important than were bestowed upon any other foreign nation there represented. American sculpture divided with France the honors of the great rotunda, and worthily sustained its claims to that splendid location.

This conspicuous success for American art, Mr. President, could never have been realized, whatever the merit of the works offered for exhibition, without the wise and devoted labors of a commissioner whose artistic enthusiasm was tempered by wise judgment, and whose zeal was guided by a remarkable executive ability; of an American who, schooled in youth in a French lycée, moved among the French officials as one to the manner born; and who, gifted himself as an artist and enriched with the fruits of long study in the great centers of the world's art, was able to handle with equal success the artistic and the business details of his commissionership, while by his courtesy and tact he allayed hostile prejudices and smoothed over or firmly controlled the jealousies of artistic coteries.

Is it not fitting that here and now, at the completion of the first year of her official recognition of the fine arts as a department of university activity, Columbia University should express her recognition of the eminent services which Mr. Cauldwell has rendered to American art, both at Paris and through a lifetime of generous zeal for the promotion of its interests? In the confident belief that this would be a worthy bestowal of a merited honor, I present Mr. John B. Cauldwell for the honorary degree of master of arts.

President Butler conferred the degree in the following words:

John Britton Cauldwell, civil engineer, student of art and letters, director of the department of fine arts of the American exhibit at the International Exposition in Paris during the year 1900, I gladly admit you to the degree of master of arts in

this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

Moses Taylor Pyne was presented by Professor Osborn, who said :

Early in 1903 the Trustees of this University resolved that the degree of doctor of letters be conferred on Moses Taylor Pyne, master of arts of Princeton University, and graduate of the Columbia Law School, 1879.

It is my privilege to-day to convey to you some of the motives of this action. For your love of books, especially of early English literature and history; for the influence you have exerted on many men of your own and the younger generation in the study of the masters; for the ideals you have formed of what an American college should be in the beauty of architecture and historical association; for the years of time, thought and benefaction you have devoted to carrying out these ideals in your Alma Mater; for the noble library you have helped to found and the collections of books you have placed there; for your public spirit in your own State in the development of the free public library system; for the fact that you have forgotten yourself in the cause of the promotion of education so that even your left hand has not known what your right hand has been doing; for the example you have given to other college men of America that the highest privilege and pleasure of life is service; for the impulse which this example has given to many in the service of this and other colleges; for all these reasons Columbia University desires to reënroll your name and place on your brow the laurels of her approval.

President Butler said :

Moses Taylor Pyne, master of arts, forceful, wise, and generous in the upbuilding of a noble university, I gladly admit you to the degree of doctor of letters in this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

Peter Cooper Hewitt was presented by Professor Pupin, who said :

I have the honor, Mr. President, to present to you a gentleman

whose discoveries and inventions mark a new epoch in the development of electric light and power. They are the result of his intense enthusiasm and long-continued effort. The flame of divine enthusiasm, fed by the solid fuel of irresistible effort, illuminates the creative activity of his useful life. This is the divine light which illuminated the lives of his illustrious grandfather, Peter Cooper, and his noble father, the late Abram Hewitt. His accomplishments prove him a worthy son of these illustrious ancestors.

This distinguished citizen of our great metropolis will be a welcome fellow-citizen of our academic community. I present to you, Mr. President, for the degree of doctor of science, *honoris causa*, Peter Cooper Hewitt, scientist and engineer.

President Butler said:

Peter Cooper Hewitt, distinguished son of a distinguished father whom this University will always delight to honor, scientist and inventor of exceptional insight and skill, I gladly admit you to the degree of doctor of science in this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

Professor Thomson, of Cambridge University, was presented by Professor Hallock, who said:

Just a century ago, no less a man than Lord Brougham, in the *Edinburgh Review*, held up Young and his classic work to ridicule; and his friend and fellow student, Sir David Brewster, more than a score of years later said that "his chief objection to the undulatory theory of light was that he could not think the Creator guilty of so clumsy a contrivance as the filling of space with ether in order to produce light." Almost simultaneously with the death of Brewster appeared that most beautiful generalization of Maxwell, which at a stroke converted the ether into the all-important factor of the material universe; and from that day the study of this subtle medium has progressed until it is safe to say that we know much more about it than about matter. The most important physical investigations of the day deal with the connection between what, for the lack of a better term, we call matter and the ether, and no one has contributed so much to the

solution of this question as this candidate. The human mind may recoil from the contemplation of limitless space and numberless worlds, but still more must it hesitate and acknowledge its impotence when called upon to penetrate the secrets of the atom, a million times too small to be seen even under the most powerful magnification. Faraday read the riddle of electro-magnetic induction; Maxwell and Hertz set light and electric waves in the same class; Roentgen added the X-rays, and Becquerell the new radiations. Whose task has it been to coördinate these widely varied phenomena and show them as applications of simple fundamental laws rather than as marvellous exceptions? Who, relying upon the simple laws of the elastic ether, has penetrated the structure of the atom and revealed its secrets? Who has taught and inspired a host of the ablest investigators in physical science? None to an extent comparable with Joseph John Thomson, Cavendish Professor of Experimental Physics in the University of Cambridge, England, whom I have the honor to present for the degree of doctor of science.

President Butler said:

Joseph John Thomson, Cavendish Professor of Experimental Physics in the ancient University of Cambridge, comrade of Maxwell, Helmholtz and Kelvin in the mastery of nature's intimate secrets, standing as they have stood on the outermost edge of the boundary of knowledge, I gladly admit you to the degree of doctor of science in this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

The Reverend Dr. Gordon was presented by Professor Van Amringe, who said:

I present to you, Mr. President, for the honorary degree of doctor of sacred theology, the minister of the historic Old South Church of Boston, Massachusetts, the traditions of which as to public service and rare pulpit eloquence he has for many years nobly sustained; whose published works on delicate and profound subjects that touch the highest interests of mankind—"The witness to immortality," "The Christ of to-day," "Immortality and the new theodicy," "The new epoch for faith"—have given

him a conspicuous place among Christian philosophers and writers—the Reverend George Angier Gordon, doctor of divinity of Bowdoin, Yale and Harvard.

President Butler said:

George Angier Gordon, doctor of divinity in Harvard and Yale Universities, scholar, orator, preacher and theologian, teacher of Christian truth in an historic pulpit, I gladly admit you to the degree of doctor of sacred theology in this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

President Humphreys, of the Stevens Institute of Technology, was presented by Professor Hutton, who said:

I present to you, sir, President Alexander Crombie Humphreys of the Stevens Institute of Technology, who has been named for the honorary degree of doctor of laws.

A graduate from the mechanical engineering course in 1881, he has shown that this education can fit a man to carry the most exacting burdens of industrial administration and affairs. From modest beginnings he became the founder of important business enterprises which are monuments of his professional ability and his faculty for organization and control. But, sir, it is not alone nor chiefly for his achievements in the field in which his engineering reputation has been won that Columbia honors President Humphreys to-day. We honor him also because of the love and loyalty which he has manifested for his Alma Mater, when at her call and in her need he laid aside the lucrative and expanding opportunities of his chosen path to assume the burden and responsibilities of the presidency of Stevens Institute, left leaderless on the regretted death of Henry Morton. We honor him for the energy, the ability, the tact, the courage, the self-sacrificing enthusiasm with which he has assumed these duties and is now discharging them. We honor ourselves in linking his widening fame to our own by the recognition which we ask you now to accord to him.

President Butler said:

Alexander Crombie Humphreys, doctor of science in the University of Pennsylvania, engineer, administrator, and educator,

President of the Stevens Institute of Technology, I gladly admit you to the degree of doctor of laws in this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

Governor Odell was presented by Professor Giddings, who said:

The men of college and university training who in America have given their lives to the service of the state have been many. Not so many of this number as we could wish have sought to apply to the practical problems of the moment those fundamental principles of sound finance and administrative efficiency which are as important to the public welfare as are the ideals of constitutional liberty which appeal strongly to the imagination. Fewer yet have been the men who, while looking thus closely at the business side of public responsibility, have at the same time shown a wide sympathy with movements for the amelioration of social conditions in our rapidly growing cities, upon the success of which the future of democracy greatly depends. It is therefore fitting that, when a man in public life has conspicuously served the community through these sympathies and by his attention to the unpopular duties of responsible financiereing, he should be honored by a university which attaches importance to the study of political and social principles. Eminently worthy of such distinction, Mr. President, is the gentleman who stands before you. As a member of Congress and as governor of the commonwealth of New York, he has compelled the people of this State to give their serious attention to problems of taxation, of a strict administration of public funds, and of the right of the people in public franchises. In the opinion of those qualified to judge, he has thus rendered a great public service. In addition he has opposed and prevented the threatened undoing of the great work of tenement-house reform in this State, and he has furthered the enactment of laws for the restriction of the crying evils of child labor. In all of these services he has displayed a mastery of those principles of economy, law and statesmanship which it is the duty of the university to recognize. I therefore take great pleasure, sir, in presenting to you Benjamin B. Odell, Jr., governor of the State of New York, for the degree of doctor of laws, *honoris causa*.

President Butler said :

Benjamin Barker Odell, Jr., son of Columbia, administrator and man of affairs, twice governor of the State of New York, I gladly admit you to the degree of doctor of laws in this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

Jules Jusserand, ambassador of France, was presented by Professor Brander Matthews, who said :

In this hall, built upon a battlefield of the Revolution, there is no need to recall the ties of gratitude and of sympathy which bind us to France. This hall is but a visible part of a larger institution devoted to the advancement of learning, and there is little danger that we shall ever overlook the ample share of France in the development of modern science and of modern art.

The lives of the leading French men of letters are now being told in a series of masterly volumes, edited by a scholar who has however chosen as his special field of study our own literature—that English literature which is ours by inheritance, like the English language and the English law. The earlier phases of English literature have chiefly engaged his attention, but there is no phase of it with which he is not familiar ; and we may apply to him the praise that Sainte Beuve bestowed on Matthew Arnold—that he has penetrated our literature by an interior line. I have now the honor, Mr. President, to present to you, to receive the degree of doctor of laws, this historian of English literature, who is also the ambassador of the French Republic.

President Butler said :

Jules Jusserand, doctor of laws in the University of Paris, interpreter to alien but friendly peoples of the literature that speaks their tongue, alike eminent in letters and skilled in diplomacy, ambassador of France, once our ally and always our friend, I gladly admit you to the degree of doctor of laws in this University, and confer upon you all the rights and privileges that belong thereto. In token thereof I hand you this diploma.

The exercises closed with the singing of "America," in which all, rising, took part, and the benediction, pronounced by the chaplain of the University.

THE ALUMNI LUNCHEON

AFTER the commencement exercises luncheon was served, as usual, in University Hall. The alumni were more largely represented than at any previous commencement gathering. The first address was that of the chairman, Dean Van Amringe, who said:

Gentlemen: One of the ceremonials proposed for this day, which, by the intervention of an authority superior to that of the University, must be postponed to a later date—the unveiling of a statue of Alma Mater given in memory of a classmate of mine, the late Robert Goelet—has brought forcibly to my attention the changes that have taken place at Columbia since the graduation of the class of 1860. I shall not weary you by a repetition of an oft-told tale: how the number of students in this institution has grown since 1860 more than twenty times; how that most accomplished scholar, eloquent lecturer and admirable teacher, Charles Murray Nairne, professor of moral and intellectual philosophy and literature, has been replaced by a score of officers; how the renowned classicist who was, I believe, the first to make generally available to students in this country the rich stores of German classical learning, Charles Anthon, professor of Greek, has been replaced by nearly a dozen teachers and assistants in his subject; how the great philosophic historian and political scientist, Francis Lieber, has been replaced by a whole school of history and political science; how, in short, all the professorships—but one—of forty-three years ago have been manifolded and to them many new ones added. The one which has not been manifolded, which has indeed been allowed to disappear, is that of the evidences of natural and revealed religion—a disappearance that I venture to think an unhappy one in an age of such pronounced cynical and materialistic tendency. I am fain to believe, however, that the various activities, concerned with the amelioration of the lot of men and their spiritual elevation, fostered by the University indicate that the root of the matter is sacredly cherished here and will grow, in the not distant future, into a department whose high function it shall be to make plain the evidences of that religion

from the teachings and the eternal verities of which all such activities must, consciously or unconsciously, proceed.

While I shall not detain you by attempting an account of the changes that have occurred, you will, perhaps, allow me a moment in this busy day to suggest that they have been in the nature of evolution and not of revolution. The prevailing design and the dominating spirit have not altered. First, character, sobriety and righteousness of life; then such knowledge and so imparted as will develop men "creditable to their families and friends, ornaments to their country and useful to the public weal of their generations." All the deliverances of this University to-day, as in 1860 and earlier, contain these two fundamental notes of character and service. Amid the multitudinous changes that the progress of time and the advancement of learning have necessitated, with the vast expansion, evidences of which we see all about us, we find the voice of Columbia the same voice as of old. It is the voice of enlightened reason and conscience, uplifted always in advocacy of pure and lofty ideals, pleading that mere money is nothing as compared with the higher things of the spirit to which it may be made to minister, that material prosperity and power are of little worth unless accompanied by civic virtue, by love of letters and the arts, and, as our lamented Rood eloquently put it, by a sense of the beautiful and spiritual purpose as well as of the utility of scientific study.

From the beginning of her history, it has been the good custom of Columbia to select sons of her own for especial honor and to adopt into her family men of accomplishment and accomplishments whatever their academic parentage. In following out this purpose of rewarding virtue and crowning excellence, she has to-day decorated two of her own people and has made notable additions to her roll of honorary graduates. You shall have the pleasure of listening to some of them.

For twenty years and more Columbia has had the nucleus of a school of fine arts; and before this nucleus was formed in the Department of Architecture, she had alumni who with scientific ability and acquirement had also an inborn artistic sense that compelled recognition and guided the footsteps of its fortunate possessors. One such alumnus, graduated a civil engineer from the old School of Mines, unconsciously fitted himself to become,

and was in the fulness of time appointed, director of fine arts on the part of the United States at the Paris Exposition of 1900. He discharged his delicate duties to the satisfaction of artists, to the credit of himself and his government, and to the delight of his Alma Mater, that has this day set the mark of her approval upon him. I present to you Mr. John B. Cauldwell.

Mr. Cauldwell expressed his appreciation of the honor conferred on him, and spoke as follows concerning the need of a school of fine arts in New York and of the service such a school might render.

With the unparalleled growth of the nation during the past decade, on commercial, financial, educational and industrial lines, our fine arts have kept well abreast; but I regret to state that many of our best and most intelligent citizens seem either unaccountably ignorant of, or at least totally indifferent to these conditions. This great seat of learning can in no way more effectively aid the cause of American art and the interests of American artists than by teaching the coming generation to hold a higher appreciation and love for the fine arts.

While to the professional painter or sculptor the university may not always appeal as a sympathetic and technical atmosphere in which to pursue his studies, and while it may not afford the direct inspiration of the artist master, it certainly can, in connection with the excellent schools of design in this city, and with the treasures of the Metropolitan Museum close at hand, offer very great inducements for a thorough study of art and a better appreciation of the æsthetic and the beautiful, which are unquestionably most essential qualifications for good citizenship.

The commercial value of artistic character in even the most ordinary productions is to-day recognized by every enlightened manufacturer; and the general cultivation of an art interest among all classes is of the greatest importance to the nation and its material prosperity. For a lengthened period we have annually expended tens of millions in importing foreign goods, which are superior to articles of similar character made in this country in only one particular—their artistic quality. When considering this fact, we cannot but acknowledge the artistic supremacy of a refined nation like France, where a most excellent system of art

instruction and liberal government patronage have proven such strong incentives. Ten years ago there were very few institutions in this country sufficiently well equipped to supply the ever growing demand for education in art. It was then almost necessary for the student to go to Europe, not only to broaden his conceptions, but really to learn the technique of his profession. Paris, universally admitted to be the art center of the world, became the Mecca for most of our students. To-day, however, American art has to a great degree emancipated itself from foreign trammels and has entered upon a career of its own, expressing American thought and reflecting American nature. We now have many well equipped institutions in which the student can develop an artistic temperament, in which individuality is recognized and encouraged while the necessary methods of expression are being acquired.

Surely this advance movement in the right direction should be the signal for Columbia to lend the same encouragement to the fine arts that she has lent in the past to literature, for the fine arts have always proven an important factor in the preëminence of every great nation.

While the societies comprising the Fine Arts Federation of New York, notably the National Academy of Design, the Society of American Artists, the Architectural League and the National Sculpture Society, the Art Commission of this city, the Art Institute of Chicago, the Pennsylvania Academy of the Fine Arts and many other similar organizations are to-day accomplishing a great work, there is still insufficient appreciation and endorsement of these labors on the part of a large number of the more prominent citizens of our great cities, who seem apathetic to the progress of this manifestation of the nation's talent.

We find the mechanical sculptor, often a naturalized citizen whose art is beneath serious consideration but who is an adept at politics, in control of some congressional or legislative committee, which permits him to desecrate a public site in the town in which these municipal art influences do not exist. The foreign portrait painter of meager reputation in his own community, when properly endorsed by some social faction, frequently captivates our wealthy families and receives undeserved recognition. Spurious old masters, clever imitations of the splendid work of the Barbizon

school and questionable examples of the fine old English painters are too often exchanged at enormous prices for the recently acquired wealth of some of our multi-millionaires. Would not these evils, which may be attributed both to a lack of patriotism in art and to questionable judgment, be remedied by a better general knowledge of the fine arts?

Columbia has ever exalted her civic pride; and there should be no reason to fear the outcome of this new school which is sure to bear good fruit in the future. Let us welcome it for the grace it will lend our material civilization; for its graduates will go forth as missionaries of art throughout the length and breadth of the land.

The next speaker was the president of Stevens Institute. In calling upon him the chairman said:

A student who spends laborious days that he may search out and reveal secrets of nature is worthy of all commendation; a student who is swift to seize upon a scientific principle and make practical application of it for the benefit of his fellows is an apostle of good service; one who can combine the two functions *omne tulit punctum*—and such an one I present to you in President Humphreys of the Stevens Institute of Technology.

President Humphreys expressed his pleasure and pride in being able henceforth to identify himself with the glories of Columbia, and explained that, in what he had to say, he should speak not so much from the standpoint of the educator as from that of the man on the outside, who through more than thirty-five years of business and professional experience had been observing the results obtained from various educational processes. He took for his text certain unfavorable conclusions regarding the value of academic and also of technical education set forth in a little book by a prominent Chicago manufacturer. This writer had found almost invariably, among men technically or scientifically educated, "a total lack of common sense and reasoning power" and was thoroughly convinced that what was true of them was true of college-trained men generally; he expressed the opinion that the usefulness of technically trained men in mechanical lines of work had been

greatly over-estimated; and he asserted that all branches of manufacturing business had been brought to such perfection that there was little chance of further improvement even by practical men. Contradicting the last of these assertions, President Humphreys pointed out that there were many problems yet to be solved in the manufacture of iron and steel and in other industries; and that the manufacturing concern managed by men who were satisfied with the progress already made would soon find itself outstripped by the concerns managed by men who were thoroughly qualified, at once technically, practically and commercially. As regards the Chicago writer's judgment of the result of academic and technical education, the speaker declared that, while it was a prejudiced and extreme presentation of the case against college training, we might obtain from it some useful warnings. He continued:

While we are not prepared to make our estimate on a cash basis alone, as this gentleman seems to have done, we recognize that in part we must submit to the cash-value test. Every true man should feel that upon him rests the responsibility of being an efficient worker. One practical test of an educational scheme is, therefore, that of its efficiency as a producer of efficient workers.

To possess a high percentage of efficiency the producer must be a specialist; but he should also be so trained as to be capable of exercising a broad and intelligent judgment of affairs outside of his immediate specialty. The student should be taught that when he does settle down to a specialty he must become a complete master of its details; for it is a common fault of the college-trained man to believe that his general knowledge will compensate for his lack of command of practical and commercial details; but by crowding more details into our courses we may have weakened the students' grip on the fundamentals and thus left them less adequately equipped to advance quickly later, in any one special line. I am inclined to believe that the men graduated from some of our technical schools ten years or more ago were better prepared to render a good account of themselves, in the

world of work, than those now taking their degrees. In my opinion the pressure brought to bear upon the technical schools to cover, in a single four years' course, more and more of the special features of engineering work should be resisted, if, in giving way to it, we are to be led into neglecting a thorough training in the more necessary fundamentals.

The ill effects of spreading out thin have been demonstrated in much of the primary and secondary school work in this country. At Stevens we find that many young men are unable to stay with us because they have been insufficiently trained in elementary studies; and some of those who do stay with us to the end of the four years' course are continually handicapped in the advanced studies by their inability to employ elementary physics and the lower mathematics as skilful mechanics handle their tools.

The technical school must avoid similar mistakes. We must be sure that we do not demand more work than the student can thoroughly perform within the time allowed. It is better to resist the temptation to introduce some new and interesting feature into the curriculum, unless we can at the same time make an equivalent elimination of some less valuable feature.

At Stevens we are attempting to do something which will, I believe, greatly assist in overcoming some of the objections to a technical education which the Chicago manufacturer has found (and which, as I think, he has greatly overestimated). For some five years we have been giving the students a course in business methods. In the limited time at our disposal we can not expect to make our men proficient in the intricacies of commercial practice, but we can give them a fair idea of the commercial conditions and limitations under which they will be obliged to work; we can warn them of the commercial dangers which they will be called upon to meet; and we can show them that, unless they make themselves competent, not only as engineers but also as business managers, they must be satisfied to be subordinates to the men of business.

If to-day all are called upon to be efficient producers, what I have said about technical education must in large measure be applicable to all higher education. It would certainly do no harm if students preparing to follow the law, medicine, the ministry,

literature—yes, and teaching—were put through a short course in business methods, adapted in each case to the special calling.

Another point at which I think we are weak in many of our educational institutions is in the matter of discipline. I believe that the faults to which the Chicago manufacturer's book points can in large measure be traced to this source. Why should there be granted to the college student, for four years, a freedom from the restraints of law and order which at no other period of his life is permitted to him? If from the high school he had gone directly into business, he would have found no such freedom from control. During his office hours he would have been called upon to obey orders unhesitatingly. He would have had no chance to select his work, there would have been no electives. He would have quickly learned that the boyish pranks, which in college too frequently degenerate into crime or something close to crime, were to be indulged in only at the risk of losing his employment.

The boy who goes directly from school into business gets a more correct view of the responsibilities of this work-a-day world than does the college student. Does not this teach us that in the college and the university we should give to the students the same practical advantages by enforcing a wise and fair but firm control? An immunity from legitimate restraint not accorded to any other class in the community is bad for the students themselves. It is well that independence of mind should be cultivated in our young men, but this independence should not be permitted to run into license. We can afford at times to regard leniently boyish pranks which contain no sting, but we can not afford to pass lightly over acts which, when looked at clearly, and not through the artificial atmosphere of college traditions, are tainted with dishonesty, trickery or cruelty.

The control which the head of a large mercantile institution exercises over his employees is not limited to office hours. If the employer learns that an employee is engaged outside of office hours in practices which show him to be an untrustworthy man, the employer, for his own protection, discharges that employee. We surely do not live up to our solemn responsibilities if we concern ourselves only with the studies of our students, and fail to protect, by maintaining a firm but sympathetic discipline, the institutions and the students intrusted to us.

The chairman next called upon Professor J. J. Thomson, saying :

It is an open secret that, on the death of our well beloved and deeply lamented Professor Rood, Columbia endeavored to attach to her staff the greatest living physicist. Having, unhappily, failed in this, we have appropriated so much of him as we can by inviting him here to receive a well-merited distinction, in conferring which upon him we honor ourselves. In your name I invite Professor Thomson, of Cambridge University, England—and of Columbia—to address you.

Professor Thomson responded :

Mr. Chairman and gentlemen : I suppose I am relieved from any obligation of secrecy by the words of the chairman, and that I am in a position to acknowledge the great compliment that was paid to me by this University when I was asked to join the teaching staff. In a country where attachment to a university is so established and developed as it is here, you will readily understand that one who has spent twenty-five years in one university, and has received countless obligations, is so closely related to that university that unless it wishes to get rid of him, he will certainly remain in its service. It was that, and that alone, that prevented me from accepting the call of Columbia University to become professor of physics ; and this compliment, the greatest I have received in my life, I shall never forget.

Our chairman has suggested that I say a word or two about the impression made upon me by universities in this country. If the kindness and hospitality received from various universities makes an expert, I am indeed an expert on American universities. I have only been a month in this country, and I have visited Yale, Harvard, Johns Hopkins, Princeton, and Columbia. In twenty-four hours I have become a graduate of two American universities, and if I can only cover two thousand miles, I shall become a graduate of another, I believe, on Friday.

I have been immensely impressed by the magnificent benevolence which has been showered upon American universities in the last ten years. I have never seen such magnificent buildings—buildings such as surround us here ; buildings that would not be possible if you did not possess a large number of wealthy and public-

spirited men, and if you did not also possess architects unrivalled, I think, in the world; buildings distinguished not only by their magnificence, but also by their beauty. I look with feelings of envy, I was going to say, but I must not use that word, on the liberality of American rich men. In Cambridge, where we are constrained as to means, we find it almost impossible to obtain adequate funds. It has taken years of hard work to raise the sum of fifty thousand pounds, of which we were in great need. In England it is exceedingly difficult to interest people in education. Here, education seems to be one of the first things brought to the attention of any wealthy man who wishes to do good.

One fault, however, impresses itself upon me, and that is the direction which this liberality has taken. I have found, on inquiry, that liberality for buildings has not in many cases been accompanied by an increase in endowments. This, I think, is a matter of peculiar regret. In this country the rewards of applied science are, I suppose, unrivalled; but taking into account the cost of living, the salaries received by teachers of pure science are perhaps lower than in any other country in the world. I think that this constitutes a peculiar danger. The lifeblood of all departments of applied science is original research. If you do not provide for research you cut off a very important source of material prosperity.

I do not plead for any extravagant endowment of the teaching profession. Its service is indeed its own reward. No pleasure that I can conceive of is comparable with that which comes over one when one has solved a problem that seemed to be hopelessly obscure. But the material man demands a certain amount of support, material support. It is not possible for even the purest scientist to live upon nothing; and if you put a man in a position in which he has to use the time that ought to be occupied in original research for all kinds of money-making pursuits, it seems to me that the man has done wrong to go into pure science at all. He has not the time to appreciate its discoveries. He had better go in at once for some occupation in which the material rewards, at any rate, are adequate.

In a country in which the universities have made the progress that they have made here in the last few years, I feel that the fault which I have mentioned is only temporary, and that in a

very short time the American universities will be distinguished, not merely by possessing the most magnificent buildings in the world, but by affording to those that hold positions of trust in them ample opportunities for research.

The chairman then introduced the French ambassador, saying :

We gain in our youth and treasure in our age a knowledge of what beautiful and sympathetic France did for us in our early trials as a nation, and of what she has always been to us, as a people, in letters, in exact science, in art and in the refinements of life. It is a very great honor and pleasure to have here with us a gentleman who, to his distinction as ambassador of France to the United States, adds eminence in literature—Dr. Jusserand, whom I am graciously permitted to call upon.

Mr. Jusserand responded :

Mr. Chairman and fellow alumni of Columbia: A heavy responsibility lies upon me. I have just been made a doctor, and a doctor should speak wisdom. The responsibility is the more felt, that I find myself surrounded with eminent men who are the private friends of the goddess Minerva; and it is a great luck and happiness for you that they are such, as the interests of your University and of your State are in their hands. I see here, among many others, such eminent men as President Butler, Dean Van Amringe and the governor of the State of New York. They are guided by that goddess, I say; I should be happy to have the same advantage.

In one thing, however, I am sure that I shall not swerve from the line of truth and wisdom. It is when I express my feelings for the great honor conferred upon me, my gratitude and my admiration for what I have seen, what you do, and what you are. I have admired your buildings, and I have admired the amplitude of your programmes, and that really catholic spirit which includes in your University every possible science, every possible means of improving the mind of man. Upon another thing also I must congratulate you, and that is your name, the name of Columbia. It is an eminently sympathetic name. Where is the one who is not ever ready to praise, to cherish, to hail Co-

lumbia? In another sense, also, it is a splendid name. It is the name of the one who came first to this land, and whose memory is most properly attached to a university, the man who wanted to know *what was beyond*. That is what we all want, we students; for we are all students, we doctors and we undergraduates and we alumni. The real student is a student all his life; he can not cease to be a student. We want to know more and we want to see beyond.

I am sure that the alumni here will never cease to be students, and worthy students of Columbia; by which I mean that, whatever career they follow, they will always reserve in their minds a temple sacred to thought and reflection, a cell inaccessible to interested motives and to immediate practical aims. Time dedicated in after life to study is sometimes considered misspent. Abstract studies are sometimes considered useless, but they are most useful. They improve the mind; and the mind should be improved especially nowadays, because nowadays—and you may be sure I speak truth: I hope Minerva listens and approves—the future does not belong to numbers, the future belongs to excellence.

You will leave the University, you young alumni, and begin careers. You will, all of you, I doubt not, become very wealthy. Everyone does in this country, as far as I can see. Whether you do so or not, I consider you as being wealthy. Indeed, at this hour you have the very wealth of which Alexander the Conqueror was so proud. You will remember that he used to distribute all his riches among his followers; and when asked why he kept nothing for himself, he replied: "The best thing I keep, a thing they have not, the best thing in the world: it is Hope." This you have. You are plucky, you are energetic, you are young. You have the spirit which insures success. You will go about in the world and see countries. I hope you will pay a visit to France, for you will be welcome there. Every American who comes to our courses of lectures and schools of art and science is sure to be welcome. The American who comes is sure to please. The French people enjoy his wit and his pluck. You should go and try.

You will succeed in life, that is certain. You will be complete men, true men. Such men are distinguished from others, from

incomplete men, by one especially important characteristic: they never forget that they belong to a community; they have a feeling of solidarity. When some good thing is within the reach of their hands, they do not think only: What will be the result for me? They think also: What will be the result for my neighbor?

And while I am advising you to be energetic, learned, kind-hearted, generous, what am I doing? I can sum it up in a word: I am advising you to be good Americans.

The chairman then called upon the governor of the State, saying:

From her earliest days, Columbia has been most honorably and usefully connected with the service of the country at large, of this commonwealth and of this city. Her public obligations have been fully recognized and religiously discharged by her devoted sons. To speak partially and locally, the transportation system of this State owes a lasting debt to John Stevens, who built the first locomotive, and to De Witt Clinton for the Erie Canal; the public school system is greatly beholden to Daniel D. Tompkins; Hamilton Fish, of recent and beloved memory, made for himself a permanent place in the history of the State and the nation; and now, to these and other illustrious Columbia names, is added that of the present chief magistrate of New York, a cherished son of the Class of '77, Governor Odell, whom I have the honor to present to you.

Governor Odell replied:

Mr. Chairman and fellow alumni: Words fail me to express my appreciation of the high honor that has been conferred upon me to-day—of the privilege that has been extended to me to meet with you as an alumnus of Columbia University. To Columbia College I have long owed fealty, and I have cherished for years the memories which cluster round the days spent in the old College on Madison Avenue. Since then great changes have taken place. The magnificent buildings in which the University is now housed are not only an evidence of its growth and of its prosperity, but a fit expression of the estimation in which it is held not only by the people of our State, but by the world.

Although this development has come to Columbia at a later

date than to some of the other universities of our land, Columbia's early history is one in which we may justly feel great pride. Hamilton, Clinton, Livingston—these are names to awaken enthusiasm. They should be an inspiration to every student from the day of his matriculation, and should give added worth and meaning to the diploma which he receives.

I have sometimes wondered whether the education which our universities are giving to-day is modelling men to meet the requirements of this period of our nation's history. An educated man should be the best and truest type of citizen. Too often, however, our educated men shun the duties of public life, and take part in politics only by criticizing and abusing those who are charged with the administration of government. I can conceive of nothing that is more detrimental to the welfare and the advancement of our republic. I was glad, this morning, to hear the president of this great University say that a college education was no excuse for such an attitude, and that educated men should bear their share of the burdens of political life.

There has never been a period in our country's history when the results of the best thought of the best men of all times were more indispensable to us: there has never been a time in which there was greater need for thoughtful educated servants of the state. With the increase of our population by immigration, with the addition to our body politic of thousands whose ideas have been stunted by years of ignorance, the situation would be dangerous if it were not met with the intelligence which inspires respect for government and for constituted authority. The concentration of wealth in large cities, the centralization of power in great corporations, the discontent of labor, raise problems whose solution will require the best efforts of the greatest minds. These problems must be solved to the advantage of all. Their solution is not furthered by unmerited criticism of government nor by demagogic attacks upon capital nor by denunciation of labor. The university should discountenance such mistaken attacks: it should train men to regard all these questions from the point of view of the general good, and to deal with them in the light of the inherited wisdom of the ages.

I have been asked frequently: Do politics pay? Would you advise a young man to become a politician? If the query, Does

it pay? is to be taken in a sordid sense—if the entrance of a young man into the political arena is to be regarded from the point of view of his personal gain—my answer has always been in the negative. But if the query means: Does it pay to be an active citizen? Is it worth while to exercise in person the rights and discharge in person the duties of citizenship? I say that the young man who has these ends in view should by all means identify himself with the politics of the nation; for success will surely crown intelligent and untiring effort. Personal disaster and defeat may come; but these are to be borne with fortitude, and in the faith that out of failure good will come to those who follow.

The chairman then said:

And now, gentlemen, as a fit ending to a happy day, we shall have some remarks from one “whose high respect and rich validity do lack a parallel”—the president of the University.

President Butler expressed his pleasure in meeting the men of Columbia, young and old, in their annual reunions. It was a delight to him, during his recent visit to the West, to hear the name of Columbia spelt out by a party of alumni on the terrace in front of the University Club in Denver. It was equally a delight to find gathered in San Francisco some twenty-five graduates of Columbia, representing all of her great schools, and all expressing the liveliest interest in her work. In such gatherings, in many parts of the country; in the reorganization, during the past year of the Law Alumni Association; and in the earnest activities of the College graduates of the past decade, he found evidence that the old College and the new University held the affection and regard of those who called her *Alma Mater*. He continued:

But I must pause for a moment to remind you that the year that closes to-day has been a year of sorrow at Columbia. Four great spirits, devoted to her ideals and living for her service, have answered to the final call. That gentle, kindly and generous spirit who served for a lifetime as a member of the corporation, and for a long period as chairman of the Board of Trustees, has passed to his rest. Mr. Schermerhorn represented everything that was best and noblest and sweetest in the traditional life of

New York, and all that he represented he brought freely and gladly into the service of his old College. Abram S. Hewitt soon followed. That great spirit, so easily our first citizen that no one has been brought forward to grasp the mantle that has dropped from the shoulders, was thinking of Columbia, planning for her, working for her as the light faded forever from his eyes. We have lost Rood, too, who brought here in the old days the newest point of view, the latest methods of research and teaching that were known in the scientific laboratories of Europe, and a devotion which knew no lessening as the years rolled over his service. Last of all, and so lately that it seems but yesterday, that modest scholar, that simple-hearted Virginia gentleman, who had gathered to himself the learning of generations, and who came and went in and out of Columbia for nearly a quarter of a century with kindness, with trust, and with service—he, too, has passed from us. These are great losses of the spirit; but I like to feel that although the doors of the University have closed for the last time upon their mortality, they have not left us, but only passed to where beyond these voices there is peace.

It is difficult to turn from the contemplation of these characters and these lives to the events of the day, but everyone of them would have had it so. They would have urged us to press forward with the Columbia they knew and loved, and while not forgetting, to show no halting in the pursuit of her ideals. In their names, therefore, as in the names of those who remain, I shall speak to you of some matters of important and present interest to Alma Mater.

You are all familiar with the fact that the University already needs more ground and that the only ground obtainable is the property, more than nine acres in extent, lying immediately south of our present site and known as South Field. You are equally familiar with the fact that every officer, alumnus and student of the University has set his heart upon the early purchase of that splendid property. Every representative man of affairs in this city who has been consulted by us has unhesitatingly affirmed his belief that the University must and should acquire South Field. A group of generous citizens united, one year ago, in buying this property in the University's interest, and they are now holding it for us provided we are able to take title to it on

October 1 next, notice of our intention to do so to be given before July 1. Weighted, as the University now is, with the heavy burden imposed by its own success in meeting the intellectual needs of this city and this nation, there seems to be but one way in which South Field can be acquired without putting new and serious limitations upon our educational work; and that is through gifts for the purpose. The cost is large—\$2,000,000—but the value is there, the need is imperative, and the future of this great metropolitan University must be made secure. The Trustees have asked, and they now ask again, that the men and women of means in this vast city unite to make this purchase possible. So high is their conception of Columbia's calling, so clear are their convictions as to her present and future necessities, and so assured is their confidence that the city of New York will hear and answer their appeal for help in this truly vital matter, that the Trustees have unanimously voted to give notice, under the terms of the existing option, that it is the purpose of Columbia University to acquire South Field on October 1 next. The magnitude of the responsibility involved in taking this step can hardly be overestimated, for it means—and I weigh my words—that unless generous friends of education shall come to our aid the present work of Columbia University must be still further hampered and harassed in order that its future may not be destroyed. The Trustees have done everything that men of courage, of foresight and of high ideals could possibly do. It remains for the men and women of New York to do the rest and set the University free to do the work for which their ancestors founded and sustained it.

It is not unreasonable for Columbia—a university that has accomplished so much—to ask and to expect this aid. From 1754 to 1891, a period of nearly 140 years, during which the city advanced by leaps and bounds in population, in influence and in wealth, the Trustees of Columbia College were left to carry their burden alone and unaided. New Yorkers were proud of the old Columbia College, but they did nothing for it. The Trustees, by the wise and careful husbanding of their own resources, have created the Columbia University of to-day, and they have made of a once local college a national university, with a reputation and an influence that extend wherever scholarship exists, and

whose graduates hold posts of dignity and responsibility all around the globe. This commanding site and these noble buildings upon it are evidence of what the University can do with but slight assistance from its friends in the city. If those friends will but follow the example of those who stood by Columbia's side when this new home was purchased and planned, there need be no misgivings as to the future.

The University is fortunate in having friends who, from time to time, make possible new forms of endeavor or assist in maintaining work that has long passed the experimental stage. It is with peculiar satisfaction that I am able to announce a gift to the University of \$100,000, for the especial benefit of the School of Law. For this gift, we are again placed under obligations to that one of our own Columbia College alumni who has, in recent years, outstripped all his comrades and fellows in his thoughtful and kindly generosity towards Alma Mater—General Horace W. Carpentier, of the Class of 1848. It is the wish of General Carpentier that a part, at least, of the income of this fund, established in memory of his brother, the late James S. Carpentier, shall be devoted to the establishment and maintenance of a noteworthy series of lectures upon the science of law, to be delivered from time to time by the most eminent jurists wherever they may be found. Just at this moment, when the School of Law emerges from the period of development which has lasted now a dozen years, and becomes a university school of jurisprudence in the fullest sense of the word, this splendid gift is both especially useful and peculiarly appropriate.

I have yet another announcement to make to-day which every Columbia man will hear with undisguised pleasure and delight, and which I hope opens a new era in the history of the University. We have heard much, and spoken much together, in recent years, of the pressing need for dormitories. Many of the advantages that attach to student life in other colleges have been denied to Columbia men because they have had no opportunity to live together in close and friendly intercourse. That period in our history is about to close. As a memorial to an honored and successful merchant of New York—Mr. Marcellus Hartley—his grandson, Marcellus Hartley Dodge, president of the class which this morning crossed the narrow line that separates undergraduate from alumnus, and Mr. Hartley's daughter, Mrs. George

W. Jenkins of Morristown, have united in tendering to the Trustees the sum of \$300,000, to be applied as promptly as possible to the erection and equipment of a dormitory for students of Columbia, preference being given to students of Columbia College. You will not fail to see the peculiar significance and the far-reaching importance of this generous gift. It comes, in large part, from one who has himself been made conscious, during the four years that are closed, of the need which he now comes forward to supply. In so doing, he fulfills the aspirations of his fellow-students and meets the highest hopes of his fellow-alumni. We shall not soon forget that this turning point in the history of student life at Columbia has been set at the instance and through the gift of a young man who felt that he could not leave his Alma Mater without at once placing there a memorial to the honored and beloved name that he bears and also supplying what he conceives to be his Alma Mater's most pressing need. All honor to the Columbia spirit and to the New York generosity which have prompted and accomplished this welcome gift.

The alumni will be glad to hear, too, I am sure, that during the year that has closed, both the Medical Faculty and the Trustees have given long and anxious thought to the pressing needs of the College of Physicians and Surgeons. This great institution, so long the pride of the medical profession in this city and an ornament to the city itself, has, like the University as a whole, suffered because of its very success. The number of students crowding its doors has become larger than its lecture halls and laboratories can contain; its curriculum has needed readjustment in order to be fully abreast of the most advanced medical education of to-day; and its clinical facilities are in need of constant extension in order that its opportunities to teach and to demonstrate may keep full pace with the practical demands of the physicians of to-morrow. The Faculty, after careful thought and consideration, have adopted and put in operation a new and thoroughly revised curriculum, which uses much of the time heretofore devoted to didactic lectures, for (1) increased amounts of laboratory work in the sciences ancillary to medicine and surgery, and for (2) additional practical instruction in the appearance and treatment of disease in dispensaries and hospitals. In the Department of Physiology, the provision for adequate laboratory instruction which the head of the Department has long desired,

will hereafter be made. An entirely new Department of Pharmacology and Therapeutics has been organized and placed in charge of a group of thoroughly trained and successful scientific men, who will spare no effort to develop this important branch in the fullest possible way. The professor of pathology has been able to effect certain changes and improvements—minor, perhaps, but by no means unimportant—in the laboratory work of his great department. In all of these laboratory subjects it is the aim of the Faculty so to divide the large classes, and so to organize the staff of instruction, that every student will have full opportunity for individual work, and that not more than ten students will be assigned any given time to a single laboratory instructor.

Similarly, great advance has been made in the development of the clinical side of the study of medicine. The Vanderbilt Clinic becomes more important each year, and its work better organized. So long as the University is without a hospital of its own, our Medical School must depend on the good will of the trustees of other institutions. We are fortunate in commanding for our students certain valuable privileges in the leading hospitals of New York, but the time is not far distant when, to equip the University properly, the Medical School must build and control a hospital of its own. In foreign universities, the greatest medical schools command their own hospitals; and the striking success of the Medical School of the Johns Hopkins University has been due, in large part, to the fact that a modern hospital is under its own immediate control.

Furthermore, we are to have for the first time a reference library for students at the Medical School, and I am confident that the beginning which is to be made in this direction will grow rapidly into a useful workshop for the men who are devoting four of the best years of their lives to preparation for the practice of medicine.

Three of our medical professors longest in service and highest in repute have recently applied for relief from active service, leaving behind them records of conspicuous success as professors and as teachers—Drs. Jacoby, Knapp and Weir. Two of our number will withdraw from the Faculty at the close of the year in order to devote themselves entirely to the practice of medicine. Both are men in the prime of life, whose deserved reputations are certain to become yet greater—Drs. Tuttle and Peabody. We

have also lost the services of the dean of the College of Physicians and Surgeons, who has withdrawn, after thirty-five years of laborious service, from all administrative duties at the University. Five years ago, Dr. McLane laid down the active duties of his chair and accepted an emeritus professorship, continuing, however, to serve as dean of the Faculty. He now thinks it wise to withdraw from that post as well, and he leaves an institution which is in very large part the creation of his own efforts.

With the raising of the standard for admission to the Medical School, it is expected that there will be in the autumn a falling off in the number of students making application for admission. It is also expected that this falling off will take place entirely in the number of those least competent to carry the heavy work of the course. There will be a constant raising of the standard for admission, to be followed at once by raising the standard of the teaching in the institution itself. All that the Faculty can do, and all that the Trustees can do with the means at their command, to increase the effectiveness of the Medical School and to place it upon a truly university basis, has been done. Large sums of money must be at hand before the ideals of the Faculty and of the Trustees can be in any wise reached in this extremely important branch of the University's work.

In our Schools of Applied Science also the increase of students has outgrown the existing accommodations and funds are lacking to provide the additional equipment that is needed. Our embarrassments are due to our success: we have done so much and done it so well, that more is constantly demanded of us. Our great difficulty is that so many persons want the University to do something for them and so few are ready to give the University what it needs—freedom to develop, funds with which it may do what it will.

It was announced, at the close of the President's address, that the Class of '83 had pledged itself to contribute \$2,500 toward the purchase of South Field. The chairman called for cheers for the Trustees, for the Class of '83, for Marcellus Hartley Dodge, and for the President—all of which were heartily given. Cheers for the chairman followed, and with these the one hundred and forty-ninth commencement ended.

THE UNIVERSITY COMMITTEE ON SOCIAL SETTLEMENTS AND ALLIED WORK

THE institution at Columbia of a committee on social settlements and allied work is a significant mark of the times. The relation of the university to settlements has always been close. Toynbee Hall was founded by a university man. The oldest settlement in America is the University Settlement in New York. It is only recently, however, that the need of a still closer coöperation has been felt between the social settlements of New York and its great metropolitan university.

It is particularly appropriate that Columbia should take the lead in this movement. The University Settlement was organized upon the initiative of two Columbia men, namely, A. C. Bernheim and John B. Pine. They were both interested in the work of the Neighborhood Guild in Forsyth street, which had been founded in 1886 by Stanton Coit, at that time an associate lecturer in the Society for Ethical Culture. When the Neighborhood Guild was about to be abandoned for lack of support, Messrs. Bernheim and Pine felt that something must be done to continue it. They knew what Toynbee Hall had accomplished and they believed that this kind of work would appeal to university men in this country as strongly as it had done to graduates of Oxford and Cambridge. In the autumn of 1890, a small meeting of graduates of some of the leading American colleges was held at the apartments of Mr. Pine, and, after much informal discussion, it was decided to organize the University Settlement Society. A general meeting of alumni took place on May 14, 1891, and the society was then formally constituted. In the signatories to the circular that was issued at this time, Columbia was represented, in addition to Messrs. Bernheim and Pine, by President Low, Felix Adler and Professors Goodnow and Seligman. The circular contains the following paragraphs:

To most college men, the idea of work among the poor conducted by college graduates, whether in East London or New York, has become more or less familiar through the success of Toynbee and Oxford Halls in the former city, and of the Neighborhood Guild in the latter. Both of the Halls were established and have been maintained by university men, and university men have made up their working force. In this country, as in England, many have recognized, as Arnold Toynbee did, the fact that a vast number of our people live in such a way as to make materialism and fanaticism almost inevitable among them, and, seeing this, have labored to understand the sources of the evil, in the hope of successfully combating it and raising the people to a higher level of civilization.

As a field for social and economic study—as a social experiment station, so to speak—a center of work for college men in the tenement districts bears the same relation to political economy and social science that the hospital bears to medicine, or field work to the study of engineering. This belief led to the founding of Toynbee Hall, whose buildings and whose atmosphere remind one of Oxford or Cambridge, where the opinion that made Toynbee came into being. Here men live for study and improvement of themselves and their fellow-men and, while enjoying much that has made their college days perhaps the best of their lives, do earnest, practical work under the incentive of association with others of like interests.

Since that time, settlements and neighborhood houses have multiplied, and the workers have come to be composed not only of graduates but of undergraduates as well. During the past year, for instance, no less than two hundred and fifty students at Columbia—including Barnard College and Teachers College—have been more or less permanently connected with the various settlements and neighborhood houses or with allied organizations doing similar work.

It was with the idea of introducing more method into such activities of the students, and in the further hope of effecting an organization that might possibly be of use not only to Columbia students but to all settlement workers as well, that

the new Committee was called into existence. After a preliminary meeting with the heads of most of the important settlements and neighborhood houses in New York, at which the idea of a closer coöperation between them and the University was warmly received, the Columbia Committee was definitely constituted. It is composed of Professor Seligman as chairman, and Professors Giddings, Woodbridge and Adler of Columbia, Professor McMurry of Teachers College, Professor Brown of the Theological Seminary, Dean Gill and Mrs. Herbert Parsons of Barnard, Librarian Canfield, the Secretary of Earl Hall, and Dr. John B. Elliott, the president of the Union of Settlement Workers.

The objects which the Committee hope to attain may be summarized as follows:

In the first place, the University will offer a number of courses of special value to workers in the settlements and to students who intend to become settlement workers. As Dr. Elliott forcibly put it, in a letter to the Committee, the best thing that a college student can get out of neighborhood or settlement work is the chance which it gives him to express his idealistic tendencies. In the social neighborhood center, such students find an actual attempt to improve social conditions; and over and above anything that either the voluntary or the professional worker can give in the way of education or of handicraft is the benefit which will ensue if he can transmit to the people with whom he comes in contact this idealistic spirit. The more clear his ideals are, and the deeper his enthusiasm, the greater his use will be. The most important preparation for social work of this kind is the knowledge and appreciation of the lives of those men and women and of the meaning of the social and humanistic movements of which the settlement has been the outgrowth. Among the important courses to be offered by the University will, therefore, be one on the great social leaders and thinkers of the past and present.

The worker, however, needs more than ideals. With many settlement workers of to-day, unfortunately, the chief stock in trade is good intentions. What is necessary in addition is some training in the problems with which they are to grapple, such as the ethnological constitution of the people; the social, economic and religious environment; the means of recreation; the conditions of work; the political affiliations, and a dozen other similar problems. The second course of lectures ought therefore to deal with the current social problems of a great city.

In the third place, more information and training are needed on the question of settlement methods. The settlement workers themselves agree that such a term as "method" must be carefully guarded, because the time of experiment has been so short and the divergencies in handling the problem have been so great that there has scarcely yet been opportunity to elaborate a definite method. Emphasis is always placed by the settlement workers upon the need of individual treatment of individual cases. At the same time, it has recently been pointed out that social workers as a whole are often too narrow, too personal, too little prepared for their work; and it is for this reason that a course is proposed on the methods and aims of settlement work.

Fourthly, the special need for preparation felt by workers in clubs and manual training classes in the settlements will be met by a series of normal and technical courses designed especially for them.

It is the intention of the Committee to give all these courses at such times and places as may be most convenient to all concerned, and to draw lecturers, not only from the teaching force of the University, but also from among the leaders and residents of the settlements and such outsiders as can be expected, by virtue of their knowledge and their experience, to render valuable assistance. It is also hoped that it will be possible to arrange these courses in such a way that some of them at least

can be counted by Columbia students toward their respective degrees.

The second chief function of the Committee will be to act as a medium of communication between the settlements and the students. It will post on the University bulletins all important notices affecting the settlements that are of interest to college students. It will recommend to the settlements such students as are qualified to enter upon the work. It will supervise the various fellowships and scholarships that are granted in the settlements, so far as the incumbents desire or are obligated to pursue their studies at Columbia, and it will endeavor to increase the number of such fellows and scholars. It will organize the student body and arrange for stated meetings between them and the representatives of the settlements.

It might be asked why the term "allied work" is included in the title of the Committee. The answer is that the notion of the settlement has been recently somewhat modified. The dominating idea to-day is that of the neighborhood house, embracing and organizing all the various elements of the neighborhood. There are however, many organizations which attempt to cover only a part of this field, and to organize some of the social elements in the neighborhood. Of such a character is the work done by many of the churches, by the Y. M. C. A., by the Y. M. H. A., and by other bodies. The University Committee is charged with the duty of acting as a medium of communication between the student body as a whole, and all such associations, thus including those that do not call themselves settlements or neighborhood houses.

The outcome of this attempt at coöperation will be watched with interest. The overtures of the Committee have been met with enthusiasm on the part of the settlement workers themselves, while on the side of the students the need for such coöperation has been strongly urged. The entire settlement work, as we have pointed out, is still so young that it is scarcely possible to formulate any scientific scheme of teach-

ing as a definite preparation. It is, however, the belief of the Committee, as of the settlement workers, that the time has now come for a closer union between the University and the settlements, and that it is a function of the University not only to increase the moral enthusiasm, but also to add to the special technical training, of the settlement workers of the future.

If there are special schools for the training of nurses, why should not similar opportunities for education be offered to those who propose to enter the far more difficult and complicated profession of settlement workers? It is hoped that this new Columbia Committee will make at all events a beginning in this direction, and thus forge another link in the chain which binds Columbia so closely to the social and political development of New York.

EDWIN R. A. SELIGMAN

SHORTENING THE COLLEGE COURSE: THE BOSTON DEBATE

AT the meeting of the National Educational Association in Boston last July, nothing was more significant than the attention attracted by the discussion of the length of the baccalaureate course and the preparation for the professional school.* The Central Congregational Church was crowded to its utmost capacity, many persons standing in the aisles throughout the entire course of the discussion, which lasted for more than two hours.

President Benjamin Ide Wheeler, of the University of California, presided as head of the Department. The first speaker was Professor Elmer E. Brown, of the University of California, who read a careful historical paper. He showed that when the American colleges were founded, in colonial days, they had a strong preprofessional trend. The profession in view was, of course, nearly always the ministry, and the

* Department of Higher Education, July 7, 10 A. M.

curriculum included courses which we should now call professional courses in theology. The clergyman completed his training, after graduating from college, by private reading and "sermonizing," under the guidance of some older clergyman. The same apprenticeship system served for the professional training in medicine and law. In the early part of the nineteenth century, however, the liberal element in the college course proper gained the ascendancy, and simultaneously came the crude beginnings of the professional schools. Professor Brown continued as follows:

The four-year college course has been one of the most rigid of the several time-allotments in our educational system. In the earlier half of the nineteenth century, the standard minimum age of admission to college was fourteen. In the past fifty years, taking the whole country into account, the average age of graduation has probably fallen slightly. But at the same time, the standard age of graduation, the "mode," has risen. Fifty years ago it was between twenty and twenty-one, now it is between twenty-one and twenty-two. With more thorough organization of secondary and collegiate education, college classes have become more homogeneous as to age.

The first serious attempt to modify the conditions for the award of the Bachelor's degree was made at Harvard in 1883-1891. In 1890, Columbia took the step of permitting Seniors to elect professional courses, and since that time other institutions—notably Michigan, Chicago, and Leland Stanford—have permitted the overlapping of the college and the professional course. President Butler's proposal of last fall brings the question into the immediate present.

According to Professor Brown, the bachelor's degree has determined no educational standard. While it has become normally of a higher grade and has become more popular as a general possession, the degree has lost its specific function of training for an occupation. The next speaker was President Eliot, whose argument in favor of the three years' course for the bachelor's degree is familiar to those who have read the

paper presented by him at the last meeting of the Association of American Universities. An abstract of his address follows:

The period devoted to professional education has been more than doubled within the last forty years in the United States, except in divinity. As it is the interest of society and of the individual that young men should enter, well trained, on the practice of a profession by the time they are twenty-five, the period of training preliminary or preparatory to professional training should end by the time they are twenty-one years old.

A boy who has had good opportunities may best leave his secondary school at the age of eighteen. At that age the average boy is ready for the liberty of a college or technical school, and will develop more rapidly in freedom than under constant supervision. Seventeen is rather young, though safe for steady boys of exceptional maturity. Between the secondary school and the professional school, then, there can be, as a rule, only three years for the college.

The principle on which the Harvard faculty has acted is this: They propose that the degree of A.B., taken in three years shall represent the same amount of attainment, or power acquired, which the A.B. taken in four years has heretofore represented.

The long summer vacations can be utilized to meet this demand, and the ordinary pace in the four years' course can be considerably accelerated by an ambitious man. Pursuing this general policy, that the requirements for the A.B. are not to be diminished, the Harvard faculty fixes the minimum residence for the Harvard A.B. at three years. They do not believe that the residence can be reduced to two years without diminishing the amount of work required for the degree.

While this change was going on in Harvard College, the university took the important step of requiring the A.B. for admission to its three oldest professional schools, divinity, law and medicine. It had already established the graduate school in arts and sciences, for admission to which a preliminary degree was, of course, required. It is unnecessary to point out that this action gives the strongest possible support to the A.B. degree. If taken by the universities of the country at large, it would settle at once in the affirmative the question of the continued existence of the American college.

Finally, if a degree in arts or science is to be required for admission to university professional schools, the road to such a degree should be as smooth and broad as possible. No exclusive prescriptions should obstruct it, and the various needs of the individual pupil should be carefully provided for in both school and college.

The next paper was by Professor Andrew F. West, the dean of the graduate school of Princeton University. Professor West had, on the evening before, at the general meeting of the Association, committed himself to an advocacy of the four-year course. His paper at this session was devoted largely to showing the evils of the elective system in its present form. He said in part:

The American college is the vital center of our educational system. It has its own field and should be encouraged to organize itself according to the laws of its own life.

By tradition the length of the course is four years. This is almost universal, and is a result of long and wide experience, not to be discarded without strong reasons. It is argued that students are coming too late to their professional work, and that the year or two proposed to be saved cannot be saved from the secondary or professional schools. But this does not settle the proper length of the college course for the majority of students who have time to take four years. To those who must leave early nearly all the professional schools are at present open.

The real difficulty is within the college. Is four years intrinsically better than three? This depends on the nature of the college course. The movement for a three-year course is strongest where elective studies are least restricted, and weakest where a large prescribed basis of studies is retained. Four years is not too much to develop satisfactorily this latter type of education, but it is difficult to argue for four rather than three on the basis of purely elective studies, and this because of the indefiniteness and heterogeneity of the elective type.

A three-year course, largely prescribed, would be better than a four-year purely elective course, but would be a serious weakening of a four-year course with a prescribed basis. The duty of

the colleges which believe in fundamental prescribed studies, supplemented by definitely prescribed elective fields of study, is, therefore, to maintain the four-year course and to teach young men that there is no real education without real effort; that it is not doing what he likes, but continued exercise in doing what he ought in matters of intellect as well as of conduct, which develops the immature entering college student into the strong, well-trained man.

The fourth speaker was President Harper, who favored a four years' course rather than one of three years, on the ground that the proposed change would be contrary to the natural drift of education.

The present difficulties come [he said] from the demands of professional education, and from the greatly increased quantity of knowledge required for entrance to college.

The adoption of the three-year course by the higher institutions would be followed by additional admission requirements, whereas requirements should be reduced rather than the course shortened. Even though the higher institutions might thus decrease the college course without loss to three years, it would be almost impossible for the smaller colleges to make a similar change, and the reduction in time would mean in the end a lowering of the requirements for the higher education.

The proposal for a three years' course furthermore ignores the culture value of the first year's work of a professional school. The combination of college and professional studies for the college degree does not injure the integrity of the college course. There will be some difficulties, of course, with the smaller colleges, but they are not insuperable.

With the immensely increased college attendance during the past decade under the four-year system, why should the course be lowered in point of years? If there is to be a shortening let it come in the lower grades. The proposition for a three-year course subordinates the college to the professional school. Why should students who do not desire a professional training be required to put up with a shortened course?

The plan adopted by the University of Chicago is very elastic. It provides a four-year and a two-year course, the latter leading

to a certificate, but not a degree; and while emphasizing four years as the normal period, it permits a student to take a full course in three years if he so desires, and likewise to extend the course to five years if he sees fit.

President Butler was the last speaker. His paper follows in full:

In my judgment most participants in the discussion now going on throughout the land as to the length of the baccalaureate course and the preparation for the professional schools err in supposing that the two questions are necessarily reducible to one, and also in taking hold of that one by the wrong end. The nature, content, and proper length of the baccalaureate course are matters quite independent of the proper standards of professional education, and are entitled to consideration on their own merits.

The one question to which the two are usually reduced is taken hold by the wrong end when it is said that the baccalaureate course should be of a stated length, say four years or three years, and that everything else in education and in life must adapt itself accordingly. Those who take this stand give us no clear notion of (1) where the baccalaureate course begins; (2) what it consists of, or (3) what it exists for. They assume that all these points are clearly understood, and generally agreed upon. Nothing could be farther from the truth. Not even the so-called reputable colleges are in anything approaching agreement as to the standard to be enforced for admission to the baccalaureate course; and while there is an external pretence of unanimity as to what the baccalaureate course exists for, that course is, nevertheless, in too many instances, fearfully and wonderfully made. Dr. Wayland said over sixty years ago that "there is nothing magical or imperative in the term of four years, nor has it any natural relation to a course of study. It was adopted as a matter of accident, and can have, by itself, no important bearing on the subject in hand." To suppose that a four years' baccalaureate course is necessary *semper, ubique, ab omnibus* is to elevate an accident to the plane of a principle.

Others take hold of the question by the middle. They fix an arbitrary age at which professionally trained men should be

ready for active work in life, and after subtracting the sum of the years that they propose to allot to the elementary school, the secondary school, and the professional school, the remaining years, three, or perhaps two, are held to be sufficient for the college.

Both of these methods appear to me to be arbitrary and unscientific, although the former is the usual academic mode of settling the question and has behind it the support of uncritical public opinion.

One of the worst of all educational evils is that of quantitative standards, and it persists surprisingly in the discussion of college and university problems. Every higher course of study that I know of, except only that of graduate work leading to the degree of doctor of philosophy at the best universities, is primarily quantitative. These courses are all based on time spent, not upon performance. The adjustment of the period of work to the capacity of individual students, now so common in elementary schools, and not unusual in secondary schools, is almost wholly absent from the colleges. The "lock-step" is seen there to perfection, and class after class of one hundred or even two hundred members moves forward (with the exception of a few delinquents) as if all its members were cast in a common mould. The place of the baccalaureate course and its standards will never be established on sound principles until the question of its length is made subordinate to those relating to its content and its purpose. Moreover, it is quite unreasonable to assume that the baccalaureate course should be of one and the same length for everybody. By the term "baccalaureate course," I mean those liberal studies in the arts and sciences that follow the secondary school period.

My own views on the questions at issue are, briefly, these:

1. The baccalaureate or college course of study of the liberal arts and sciences should be preserved at all hazards as an essential part of our educational organization. It is distinctly American and a very powerful factor in the upbuilding of the nation's culture and idealism. It should be treated as a thing of value in and for itself, and not merely as an incident to graduate study or to professional schools.

2. The college course is in serious danger by reason of the fact that the secondary school is reaching up into its domain on the

one hand and the professional school is reaching down into it on the other. Purely professional subjects in law, medicine, engineering, and architecture are widely accepted as part of the baccalaureate or college course by university colleges, and now independent colleges in different parts of the country are trying various devices with a view to doing the same thing. If this tendency continues unchecked, at many institutions there will soon be little left of the old baccalaureate course but the name.

3. To preserve the college is (*a*) to fix and enforce a standard of admission which can be met normally by a combined elementary and secondary school course of not more than ten years well-spent, and (*b*) to keep out of the baccalaureate course purely professional subjects pursued for professional ends by professional methods. The college course, in other words, should be constructed for itself alone and for the intellectual, moral and spiritual needs of the youth of our time, without reference or regard to specific careers. This course must be widely elective, and so offer material to enrich and develop minds of every type. This course is the best preparation for the professional study of law, medicine, divinity, engineering, architecture, and teaching, simply because it does what it does for the human mind and the human character, and not because it is so hammered and beaten as to serve as a conduit to a particular career or careers.

4. This course should be entered upon at seventeen, or in some cases at sixteen. Eighteen is too late for the normal boy; the boy who has had every educational advantage and is not ready to meet any existing college entrance test before he is eighteen has been dawdling and weakening his mental powers by keeping them too long in contact with merely elementary studies.

5. For the boy who enters college at seventeen and who looks forward to a career as scholar, as teacher, or as man of affairs, four years is, ordinarily, not too long a time to spend in liberal studies. On the other hand, the boy who, entering college at seventeen, purposes to take up later the study of a profession in a university, ought not to be compelled to spend four years upon liberal studies just at that time in his life. To compel him to do so is to advance the standard of professional education arbitrarily without in any way raising it. It is a fallacy to suppose that the more time a boy spends in study the more he knows and the

more he grows. Whether he grows by study depends entirely upon whether he is studying subjects adapted to his needs, his interests, and his powers. Pedagogues suppose that the more time a boy spends in school and college, the better; educators know the contrary. There is a time to leave off as well as a time to begin. A boy *can* develop intellectual apathy in college as well as knowledge, weakness of will as well as strength of character.

6. The earlier parts of professional courses in law, medicine, engineering, and the like, are most excellent material for the boy of nineteen or twenty. He should begin them at that time and complete his four years of professional study by twenty-three or twenty-four. To postpone his professional course later than this is not only to waste his time, but to waste his mind, which is far worse.

7. There should be a college course two years in length, carefully constructed as a thing by itself and not merely the first part of a three years' or a four years' course, which will enable intending professional students to spend this time as advantageously as possible in purely liberal studies. The university colleges can establish such a course readily enough; the independent colleges will have to establish such a course or see their influence and prestige steadily decline. To try to meet the new situation by simply reproducing all present conditions on a three-year scale instead of on a four-year scale, is a case of *solvitur ambulando*. The shortening of the college to three years for all students involves an unnecessary sacrifice. As usually defended, this policy involves no educational principle, but merely concedes a year of liberal study to the modern demand for haste and hurry.

8. Whether the completion of such a two-year course should be crowned with a degree is to me a matter of indifference. Degrees are the tinsel of higher education, and not its reality. Such a two-year course as I have in mind would imply a standard of attainment at least as high as that required for the degree of A.B. in 1860, which had many characteristics that we of to-day persistently undervalue. If this discussion could be diverted from degrees to real educational standards it would be a great gain. The compromise plan as to degrees, now becoming so popular, whereby the baccalaureate degree is given either for two years

of college study and two years of work in a professional school, or for three years of college study and one year of work in a professional school, is disastrous to the integrity of the college course. It deliberately shortens the college course by one year or two years while proclaiming a four-year college course. It is a policy that only university colleges can adopt; independent colleges must suffer if it becomes a fixed and permanent policy.

9. The most difficult point to establish, apparently, is that at which the baccalaureate course should begin. Colleges with courses nominally four years in length are admitting students with from one to two years' less preparation than is demanded by other colleges with four-year courses. The lax enforcement of published requirements for admission, together with the very general acceptance of certificates from uninspected and unvisited schools, has demoralized college standards very generally. It does not make much difference how long the baccalaureate course is if it does not begin anywhere.

10. A university ought not to admit to its professional schools students who have not had a college course of liberal study, or its equivalent. A minimum course of two years of such study should be insisted upon. A four years' course should not be required, for the two reasons (1) that it delays too long entrance upon active life work, and (2) that it does not use the time and effort of the intending professional student to the best advantage.

11. For a university to admit professional students direct from the secondary schools is to throw the weight of its influence against the spirit and ideals of college training, and to prepare for the so-called learned professions a large body of very imperfectly educated men. To say that any other procedure is undemocratic is not only a grave misuse of words, but is to imply that the universities should not struggle to give this democracy what it most needs, namely, well-educated and highly trained professional service.

The discussion following the reading of the papers was led by Professor D. W. Hering, dean of the graduate faculty of New York University, whose main point was that a college course and a course in college are not necessarily the same thing. He said, in part:

The principal desiderata seem to be: (1) Broad culture in high school and college before entering upon professional work; (2) the opportunity to begin and complete a professional course at an age not unreasonably advanced; (3) the opportunity to acquire oneself creditably in both, which means that the work of one should not be mixed with that of the other.

Two years in college is a short time in which to accomplish the first; four years in college makes the second almost impracticable; three years in college will meet all three if the distinction called for in the last is observed, namely, if the course in college is devoted to a college course. There are some who consider four years in college better than three, and for those I would make the course four years by beginning lower.

The voluntary discussion which followed showed the wide interest which the papers had aroused in the audience. President G. Stanley Hall, of Clark University, spoke on the biological tendency toward a longer period of preparation for life work; the indirect value of the educational environment through as long a period of time as possible; and the logical preferableness of variety over uniformity, as exemplified by elective and prescribed work. The dean of Worcester College, Oxford, Mr. W. H. Hadow, said that he wished to make an emphatic protest against the tendency to hurry and cram, the logical end of which was to have everybody able to do everything—rather badly. At Oxford the fourth year was regarded as of more value than the other three put together. He felt that experiments at this critical stage in college education involved great danger.

After two or three minor contributions to the discussion, President Eliot arose in rebuttal, and, in a brilliant speech of a few minutes' length, attacked the premises and conclusions of each one of his colleagues, to the great delight of the audience. In recommending experiment as the only possible solution, he suggested that Princeton keep on trying the experiment of the old-fashioned four-year course: nothing, he said, would prove more illuminative to the country in general. President

Harper's advocacy of a four-year college course was, he thought, of no value, in view of the fact that at Chicago students could count work in the professional schools toward the bachelor's degree. President Butler's recommendations were summarily dismissed as "inconclusive."

President Eliot was followed by President Hyde of Bowdoin, who made the point that the result of the desire to make a man, first, a master of the tools of knowledge and, secondly, a master of men in some one subject or group, has reached its second stage. The first stage was a system of free and unguided election; the second is the more general adoption of what is generally known as the group system. He spoke approvingly of the recent careful development of the Yale College curriculum. President Hyde said also that in view of the disorganized condition of secondary education, he felt that the present would be a poor time to cut down the time requirement for the A.B. degree.

The last speaker, President Faunce of Brown, protested against undue emphasis on the question of a time limit. Students, according to their preparation, circumstances, and general ability, ought to be able to take without prejudice the degree in three, four, or five years.

The discussion, of which this paper gives only a bare outline, will be printed in full in the proceedings of the Association.

F. P. KEPPEL

EDITORIAL COMMENT

Of the first Commencement Day meeting of the alumni, held in 1898, the *QUARTERLY* said: "The practice of making Commencement the rallying point of the year for the alumni is one

The Alumni at Commencement which must inevitably gain a stronger hold as usage renders it more familiar and as the continually increasing number of alumni returning to render their fealty to Alma Mater gives it richer associations." This prediction

was amply realized on the tenth of June last, not only by the large number of alumni—very nearly a thousand—who attended the luncheon and the class meetings and dinners which followed it in the evening, but also by the spirit which characterized every gathering. The great audience which listened to the President's announcements, and which was the first to hear the good news that a dormitory had been presented to the University, was worthy of the occasion and enthusiastically demonstrated its appreciation of Columbia's good fortune. As at all Columbia's recent Commencements, the speeches of the recipients of honorary degrees lent dignity and interest to the proceedings. Contrasting Commencements of this type with those which for decades were held in the old Academy of Music or in Carnegie Hall, and which were consecrated exclusively to the bestowal of degrees and prizes, it seems almost incredible that a few years can have wrought such a change; and those who are fortunate enough to witness it cannot but feel that the general and enthusiastic participation of the alumni in Commencement is one of the most admirable results which have followed the removal of the University to its present site.

The determination of the Trustees to purchase South Field is second in importance only to their decision to acquire the site for the University on Morningside Heights, and no one can doubt the wisdom of their action who is in the least familiar with the results following the first and most critical step which was taken in 1891. The only objection seriously urged against the original purchase, that the land was not extensive enough to permit of residences for students, is now likely to be met; for while no plans for the development of South Field have as yet been accepted, it seems probable that a portion of it will be used for dormitories. By this purchase the grounds will be increased fifty per cent. in extent and the University will be assured of all the space likely to be necessary for the development of its highest educational efficiency. But, as the President said, in announcing the decision of the Trustees, while it is settled who shall own South Field, the question remains how it shall be paid for. The magnitude of the responsi-

bility assumed, the necessity of assuming it, and the claim of the University to the support of the community in meeting it, are so clearly set forth in his announcement (*supra*, pp. 418, 419), that there is really nothing left to say. We can only emphasize his intimation that the immediate future of the University has been further imperilled in order to preserve its distant future from destruction. The magnificent progress which Columbia has made during the last quarter of a century can not be continued, nor can its present position among the leading American universities be maintained, if it is left to stagger under a crushing burden of debt.

The gift of a dormitory, announced at Commencement, has probably afforded greater satisfaction to more Columbia men than any other single benefaction, for it carries with it the assurance that, of all things lacking, the one thing which has been most desired by students and alumni, young and old, is about to be supplied. The gift, far from insignificant in itself, is yet chiefly significant as the beginning of a new era, the birth of a new life at Columbia, and in this aspect its value to the University cannot be overestimated. In the reestablishment of a dormitory system at Columbia, beginning with the building which we have just received, and in the revival of the community of student life which such a system alone renders possible, history will repeat itself. King's College, founded on the model of the Oxford colleges and imitating them in many particulars, required its students to room in the college and to live in hall, and not until after the Revolution was this practice wholly abandoned. Whatever may have been the cause, the effect of this change of policy was most unfortunate: it narrowed the influence and usefulness of the College and made it a local institution; and in succeeding years, as the student life of other colleges presented increasing attractions, Columbia was subjected to an increasing disadvantage. Not only has the absence of dormitories kept away students living at a distance, but it has served to drive away many residents of the city, who desired the college life which only dormitories can give and who, therefore, went elsewhere, taking with them the interest of their friends and families and thus depriving Columbia in many in-

stances of the personal ties which should have identified the College with the life of the city. To this, more than to any other one circumstance, may be attributed the lack of sympathy and support from the City of New York which Columbia has experienced in past years. Not until recently, when the development of the University has compelled students to come from a distance and has commanded the respect and admiration of the city, has this disadvantage been to any extent overcome. The increase of the student body since the removal of the University to Morning-side Heights has come in spite of the fact that Columbia could not offer the kind of student life which great numbers of would-be students desired; and when this want is supplied the greatest obstacle which now stands in the way of the University's development will be removed. Looked at from this point of view, and with the belief that the first dormitory will not long remain the only dormitory, it is no exaggeration to say that the gift will be of inestimable value to the University, not only in attracting students who are now repelled, but also in enriching and developing the life of the student community. That the gift comes from one of our own alumni, and from one who is so distinctively a son of the Columbia of to-day, makes it the more welcome; and the donors have received, as they richly deserve, the gratitude of the alumni and of all who are interested in the prosperity of the University.

Like the library, this building will be a memorial of one of New York's great merchants and will represent the recognition and the reward which commerce offers to education. It will fitly commemorate the public and philanthropic services of Marcellus Hartley; and while connecting his name with the happiest associations of coming generations of students it will teach them the value which he placed upon the things for which Columbia College stands.

One hundred thousand dollars seems a large endowment for special lectures in a single field of knowledge; and for an ordinary lecture course the income of such a fund would assuredly be in excess of the market rate. But the lecturers
The Carpentier Lecture Fund and the lectures that General Carpentier hopes to secure are not of the ordinary type. The lecturers, he says,

in his letter of gift to the Trustees, are "to be chosen for preëminent fitness and ability"; and he adds: "I hope this lectureship will be made so honorable that nobody, however great or distinguished, will willingly choose to decline your invitation." And the lectures are to be published; *i. e.*, the lectureship is established in the hope of securing books which will be of permanent value. For obtaining such a result the donor evidently doubts the adequacy of the annual income: the lectures are to be given "at least as often as every third year."

The field of the lectureship is "the science of law," viewed as "the cement of human society" and as "the highest expression attainable, among men in civil society, of the divine purpose." This is the aspect in which law has presented itself, in the ancient as in the modern world, to the greatest philosophers and to some of the greatest lawyers. The names given to this mode of regarding law, or to law thus regarded, have varied from age to age. It has been called the "philosophy of law"; it is still called, as General Carpentier would perhaps call it, "natural law." The newest name is "comparative jurisprudence"; for in the reaction against the narrowness of purely national jurisprudence some of the most progressive legal thinkers have emphasized anew the essential unity of human law, not as a body of unchangeable "natural" rules, but as a gradual progress toward a dimly descried universal order. When a new Montesquieu or Jhering, or even a new Coulanges or Maine, is ready to reveal some unrecognized phases of the spirit of laws or to throw new light, by the comparative method, on the evolution of law, the income of the Carpentier fund for several years will be a scanty recompense for his service.

Such luminaries as these, however, do not appear in every generation. What is to be done with such a fund from year to year? There is always, at least, the latest method of approach to some side of the many-sided problem. In our own day, the line of most active advance is still that of historical investigation. If a Maitland will bring the history of English law down to the time of the Tudors, if an Ames can be persuaded to write a history of English actions, if a Holmes can be induced to formulate his maturer interpretation of the development of our common law, the income of the fund will be well expended.

Finally, there is always the prospect of a more scientific presentation of the principles of our own national law. General Carpentier is doubtless aware that the legal writings of Kent and of Story, like those of Blackstone, were the fruit of lectureships rather than of law professorships of the modern American type. Changes of educational method have made the lawyer who devotes all his time to instruction as busy a man as his brother on the bench or at the bar, and as much the slave of engrossing details. Kent and Story were, first of all, counsellors and judges, teachers only in second instance; and it is perhaps as likely that their successors will be found on the bench or at the bar as that they will appear in law faculties. To stimulate the lawyer busied in any field of professional activity to such labors as have produced our legal classics, some special incentive seems to be needed. It is the latest fashion in educational benefaction to endow research. The Carpentier fund is designed to stimulate production—to induce those who have already demonstrated their capacity for research and for the effective presentation of its results, but who have become immersed in practical labors, to make for themselves a period of leisure and to give to the world the results of their later studies and ripened thought.

General Carpentier wisely remembers that “time is wiser than men,” and expressly declares that his plan is not obligatory. If it shall prove impracticable to attain the results he desires by the methods he has proposed, the Trustees are authorized to devote his gift to the endowment of a professorship in the School of Law. In the meantime, he does not even insist that the entire income shall be devoted to the purposes of the lectureship. To the University he thus leaves the largest liberty, but it is of course in honor bound to attempt to carry out his purpose and to give his plan a fair trial.

More than two months after Commencement, and just as the QUARTERLY goes to press, comes the announcement of Mr. Joseph Pulitzer's princely gift for the establishment of a school of **A University School of Journalism** journalism. Such details regarding the donor's aims and expectations as have been made known, and such forecasts of the character of the new school and

of its relation to other departments of the University as are at present possible, will be found in this number of the *QUARTERLY*, under the heading of University news. Much skepticism has been expressed of late years, in the journalistic press itself, regarding the possibility of developing a useful course of university education for journalists. It is of course impossible, as a leading journal has recently urged, to create by instruction those traits of character which constitute the most important difference between journalists. It is, however, equally impossible to create by instruction those traits of character which distinguish the scrupulous and high-minded lawyer from the pettifogger; but this impossibility has never been regarded as an argument against teaching law in a university. It is, again, as impossible for a university to teach a student of journalism all the practical details of his profession as it is for a university to give the law student that part of his training which he is wont to acquire in a law office; but all of the general culture and much of the special training which are required for journalistic work of the highest type are undoubtedly communicable by instruction. Columbia University has already had many students, especially in its graduate schools of Philosophy and of Political Science, who were preparing themselves for journalism, and not a few of these to-day hold important positions in their profession. If the undergraduate and graduate courses in literature, in history, in political and economic science, and in other subjects which are of especial importance to journalists, shall be coördinated and developed with the special purpose of training men for journalism, and if these courses shall be supplemented, as is proposed, by such technical instruction in purely professional matters as may wisely be undertaken by the University, there is no reason to doubt that the new school will amply justify itself.

On the fundamental question whether the University is the place for training journalists, Mr. Pulitzer himself, with his long experience in practical journalism, is an expert of the first order. He has observed for years, and has doubtless compared, the work of journalists trained in our colleges and universities and that of journalists who have grown up in the newspaper business; and the fact that he is ready to invest a million or more in university education in journalism is an eloquent evidence of the character of his conclusions.

Professor Ware's retirement from active service at Columbia and his well-earned appointment to an emeritus professorship of architecture mark the close of a period of signal service to the University. For twenty-two years he has

Professor Ware and

His Work

labored with ardent devotion and untiring energy for the development and improvement of the school which he established at Columbia; and this long period constitutes but a part of his life-work for education in architecture. Throughout his career he has represented the idea that architecture is not simply a craft to be learned through apprenticeship, nor merely a branch of engineering to be taught in a scientific school, but an art to be taught in an environment primarily artistic. Before he came to Columbia he had developed a course in architecture in the Massachusetts Institute of Technology, and the school which he established at Columbia was, at first, a department in the School of Mines and, later, a separate school under the jurisdiction of the Faculty of Applied Science; but his aim was not attained until, by diminishing the purely scientific element in the architectural course and by increasing the liberal and artistic elements, he had emancipated the Columbia School from the engineering tradition and had prepared the way for its independent existence as the nucleus of a School of Fine Arts. The development of this new school on lines sufficiently broad to justify its title will be, in no small degree, the result of Professor Ware's ideas and exertions.

The regard and affection felt for him by his former students were strikingly evidenced, last autumn, in connection with the celebration of the twenty-first anniversary of the founding of the Columbia School.* In noticing this anniversary, *The Architectural Record* published an editorial article, from which we quote the closing paragraph:

What the graduates of Columbia have accomplished may be read largely in the buildings they have erected far and wide over the land. But what Professor Ware has accomplished extends far beyond their achievements. The presence of the school in Columbia University; the influence of its ideals, of its teaching, of its graduates, upon the community and profession throughout this great metropolitan district; the reputation achieved by its

* COLUMBIA UNIVERSITY QUARTERLY, V, 1 (December, 1902), pp. 71-73.

graduates abroad, in Paris and elsewhere, and the credit this has reflected on the city and country from which they came; the inspiration and example which this school has offered to other schools and the measure in which it has exalted the profession of architecture in the esteem of the community, drawing to it men of superior calibre who would otherwise have gone into other pursuits—these are services which are not visible and tangible like the buildings erected by Mr. Ware's former pupils, but they are no less real, no less valuable: a splendid harvest of results from his twenty-one years of faithful and unselfish sowing.

A university's recognition of a permanent and obvious benefit is not only enduring but always fresh, for it is the result of an ever repeated impression received in ever renewed youth. Wil-

**William Earl
Dodge**

liam Earl Dodge will be remembered for a few years as a prominent merchant and financier. He will be remembered for many years as a good citizen and an earnest Christian, who gave time and thought and toil, as well as money, to the advancement of public and religious interests. He will be always remembered as the giver of Earl Hall; for Earl Hall has become what it was meant to be—a religious center for the social life of the University—and it will keep its founder's memory perpetually clear in the fresh gratitude of successive student generations.

THE UNIVERSITY

The Trustees have received a gift of one million dollars from Mr. Joseph Pulitzer, of New York, for the establishment and endowment of a school of journalism in Columbia University. This generous gift puts into effect a purpose which Mr. Pulitzer has long had in contemplation, namely, the provision of an opportunity to secure in a great university both theoretical and practical training for journalism considered as a profession. The school of journalism of Columbia University will take rank with the existing professional schools of law, medicine, engineering, architecture and teaching. Subject to the general jurisdiction of the

University Council, its course of study will be formulated and its administration carried on by a faculty of journalism, the members of which will be appointed by the Trustees in the near future. The erection of a suitable building to accommodate the new school will be begun at once, and, after conference with President Butler, Messrs. McKim, Mead and White have already undertaken the preparation of preliminary plans and sketches. A provisional site for the building has been chosen in the university quadrangle on Amsterdam Avenue, immediately south of Fayerweather Hall and north of the projected building for the School of Law. It is hoped that the building may be pushed to completion so that it may be occupied in the autumn of 1904. The estimated cost of the building, fully furnished and equipped, is about \$500,000.

Both Mr. Pulitzer and Columbia University recognize that with the establishment of a school of journalism of university grade a new academic field is entered upon, and in order that the best ability and experience of the profession of journalism may guide the new undertaking, an Advisory Board has been provided for, the first members of which are to be appointed by the University upon the nomination of Mr. Pulitzer. The President of the University is to be, *ex officio*, a member of this Advisory Board. Mr. Pulitzer will nominate the members of this Advisory Board in time for action by the Trustees of the University at their next stated meeting, on the first Monday in October.

A meeting of the Advisory Board will be called as soon as possible after its members are appointed, and the fundamental principles which should govern the school of journalism will be discussed and agreed upon. After the suggestions of the Advisory Board have been communicated to the University Council and to the Trustees, the work of organizing the school will proceed with all possible speed, in order that instruction may be given just as soon as the building is ready for use.

A committee consisting of President Butler, and Professors Burgess, Peck, Brander Matthews, G. R. Carpenter and Giddings, has already been appointed to frame a report for early presentation to the University Council regarding the organization and academic relations of the School of Journalism.

The length of the proposed course in journalism and its con-

tent will be decided upon after the Advisory Board has expressed an opinion on both matters. Thorough training in written English, in logic, in the elements of economics and of political science, in the history of the United States and the contemporary history of Europe will certainly be included. The more technical courses will comprise instruction in newspaper administration, newspaper manufacture, the law and the ethics of journalism, the history of the press and related subjects.

Specific announcements concerning the term of admission to the School of Journalism, the length of the course, and the date at which students will be received may be expected within a few weeks.

If, at the end of three years, the School of Journalism is in successful operation, Mr. Pulitzer will give to Columbia an additional million dollars, the income of one-half of which will be devoted to the maintenance of the School of Journalism. The income of the remaining half million will be expended for purposes to be hereafter agreed upon between Mr. Pulitzer and the University.

COMMITTEE ON EMPLOYMENT FOR STUDENTS

During the year 450 students applied to the committee for work, an increase of 222 over last year. Of this number 50 were women. Last year the women received from the committee no direct assistance. Of the 450 applicants 273 reported their earnings on blank forms provided by the committee; of these 43 reported that they had earned nothing whatever. 407 calls for student assistants were received. Upon investigation 82 of these were found impracticable. Of the remaining, 231 resulted in positions. Through the employment obtained for them by the committee the students earned \$16,654.44, as against \$6,459.68 earned last year. The money the students earned on their own initiative amounted to \$41,122.13, as against \$9,204.50 recorded last year. The total earnings that the students obtained, both with and without the aid of the committee, amounted to \$57,724.57, as against \$15,664.18 for the year 1901-02.

The average amount of money earned by each student in the College was, during the summer vacation (1902), \$161.68, and during the academic year, \$101.34; in the Schools of Applied

Science the amounts were \$210.70 and \$113.47 respectively; in the Medical School, \$77.58 and \$37.61; in the Law School, \$218.95 and \$132.18; in the Graduate Schools, \$170.69 and \$223.51. While some students earned less than the average amount, others earned considerably more. One law student earned over \$1,600 as correspondent for a newspaper. Two or three others earned over \$600 as tutors. Two directors of play-centers of the Board of Education earned each about \$500. A number of the students in the Law School taught in the public evening schools, and in this way earned about \$300 each. A stenographer and typewriter earned over \$150. One man drove a truck on Saturdays until he could get something better to do. At the end of the academic year he had made over \$350. In the College a life insurance agent cleared over \$700. An organizer and director of boys' clubs made about \$600. Of two other students that came to the University with little or nothing, one earned by tutoring and teaching over \$250; the other, over \$150 as tutor and telephone operator.

Among the graduate students the work done is almost exclusively tutoring, teaching, writing and lecturing. In these various ways several men earned over \$700 each; other avocations were, however, pursued by some students. A violinist, playing in a theater orchestra at night, earned about \$400; and another student, by conducting a steam laundry at a summer resort, about cleared his tuition fee. In the Schools of Applied Science the usual means of earning money are tutoring and draughting. Two men tutoring in mathematics, physics and chemistry each earned over \$800. One student made \$350 as draughtsman. Another earned a part of his tuition fee by operating a stereopticon for the free lecture bureau of the Board of Education. A Cuban earned about \$75 as agent for a cigar company. Generally speaking, the amounts earned by applied science students are small. So, too, with students of the Medical School. The largest amount earned by one student, who acted as clerk, was \$205. A licensed druggist among the students earned about \$200 at his profession. Several students, as masseurs and nurses, earned small amounts. As a rule, throughout the University, where a student earned more than the average amount he invariably was a student that could do some one or two things well, and who was able and willing to adapt himself to circumstances.

New figures of the cost of attending the University were obtained from the students. A statement of the low and average expense, with the average amount of money earned by the students, and the average number of hours per week spent in remunerative employment, is given below.

School	Low Expense	Average Expense	Average Earnings	Hours per Week Spent in Employment
College.....	\$456	\$653	\$101.34	13
Applied Science.....	624	772	113.49	12
Law.....	472	609	132.18	12
Medicine.....	560	672	37.61	3
Graduate.....	481	641	223.51	15

The most important work of the committee during the year was the systematic attempt to procure teachers from among the students for the public evening schools and the summer vacation schools of the Board of Education. For the evening school positions a list of about 75 students was presented to the Board of Education, and about 125 students were induced to apply for positions in the summer vacation schools. In addition to this effort the systematic attempt to secure positions for the students at summer hotels was renewed. About 700 letters were sent out to the proprietors of the leading hotels in the Middle Atlantic and New England States. Probably 25 or 30 men have secured positions as a result of this attempt. Besides this work a number of suggestions were followed up, and nearly all of them resulted in some good. Every indication is for a more successful showing next year.

REUBEN A. MEYERS

SUMMER SESSION

The registration at the Summer Session of 1903 shows an increase of almost 50 per cent. over that of the previous year, an increase that is truly remarkable. The growth of the Summer Session since its beginning in 1900 is well illustrated by the following comparative table:

	1900	1901	1902	1903
Total attendance.....	417	579	643	940
Number of courses offered.....	29	43	61	77
Aggregate attendance on courses.....	1085	1406	1559	2313

Adding the 53 students who attended the Summer School for

Medicine, in which 11 courses were given, we get a grand total for 1903 of 993.

The prevailing idea that the Summer Session is patronized almost entirely by women is proved to be erroneous by the fact that almost 40 per cent. of the students are men. The classification of students according to sex is given in table A, table B giving the number of old and new students. Of the 326 old students, —attended one or more of the Summer Sessions of 1900, 1901, and 1902.

An idea of the educational preparation of the students at the Summer Session is furnished by table C, from which it will be seen that a considerable proportion of the students are graduates of higher institutions of learning. The distribution of students with reference to teaching positions is given in table D. Of the students not engaged in teaching, a number are candidates for admission to the Freshman Class of the College and Schools of Applied Science, while others are regular Columbia students endeavoring to remove conditions.

The distribution of students according to residence is given in table E. One of the most interesting features of the Summer Session is the fact that the students come from all portions of the United States and even from foreign countries. No less than 42 states and territories are represented, as well as Japan, Canada, and Cuba. No doubt the convention of the National Educational Association held at Boston in the early part of July was responsible for the presence of a number of students from the far West and South, as it unquestionably had a decided influence on the general attendance.

* * *

Since the annual appointments in June last, several important changes have been made in the teaching staff of Columbia University. Mr. Bert Hodge Hill, who was appointed to tutorship in Greek, was released from his engagement in order to accept an assistant curatorship in the Boston Museum of Fine Arts. Dr. Roscoe Guernsey was appointed to fill the vacant place. Similarly, Mr. James Burt Miner and Mr. James Pertice Porter, appointed assistants in psychology, were released to accept instructorships in the University of Illinois and in Clark University,

respectively. Their successors have not yet been appointed.—Dr. Frank Leo Tufts, of the Department of Physics, has been granted a ten months' leave of absence, in order to accept the John Tyndall fellowship. Dr. Tufts will spend the time in physical research in the laboratories of the German universities. The last incumbent of the fellowship, Dr. Bergen Davis, returns to the University in September as a member of the Department of Physics.—Mr. Armour Caldwell, a graduate of Columbia College in the Class of 1902, has been appointed to an assistantship in English.

UNIVERSITY LEGISLATION

THE TRUSTEES, JUNE MEETING

The thanks of the Trustees were tendered to General Horace W. Carpentier, of the class of 1848, for his generous gift of \$100,000, as a fund in memory of his brother, James S. Carpentier, the income of which is to be used for the benefit of the Law School in the manner indicated by the donor.

The Trustees accepted with thanks the medal struck by the St. Nicholas Society in commemoration of the 250th Anniversary of the City and presented by the Society to the University.

Invitations were received from the University of Queens College, Kingston, Ontario, and Hobart College, New York, announcing the installation of Principal Gordon and President Stewardson, and the President was authorized to appoint delegates to represent the University.

The Finance Committee presented a report in regard to the purchase of South Field.

The sum of \$1400 was appropriated, in addition to the amount

named in the budget for the current year, for fuel purchased for the use of the Medical School during the fiscal year 1902-3. The appropriation of \$500 for an Assistant in Palæontology, contained in the budget for the year 1903-4, was made available for "assistance" in Palæontology. The budget was amended by inserting provisions for the Departments of Pathology, Surgery, Therapeutics and Clinical Medicine, German, Mechanical Engineering and English.

The President presented the following announcement of the death of Professor Thomas Randolph Price, which was entered upon the minutes:

It is my sad duty to announce the death, on May 7, of Thomas Randolph Price, Professor of the English Language and Literature in Columbia University since 1882. In Professor Price, Columbia University and the country lose a member of the very small group of truly great American scholars. Built upon the foundation furnished by the character of a Virginia gentleman, Professor Price's scholarship gave to his mind and nature a rare and enduring charm. He was edu-

cated at the University of Virginia and at the Universities of Berlin and of Kiel. He broke off his studies in Europe in order to enlist as a private in the ranks of the Confederate Army, and served with gallantry and devotion the flag and the cause to which his mind and heart gave willing allegiance. Upon the conclusion of the Civil War, Professor Price entered upon his career as a teacher, serving successively as Principal of the University School in Richmond, Virginia, as Professor of Latin and Greek at Randolph-Macon College, and as Professor of Greek in the University of Virginia. It was from this latter post, in which he succeeded his life-long friend, Gildersleeve, that he came to Columbia to the chair which he occupied for twenty-one years. At the time of his death, Professor Price had but five seniors on the roll of the University's teaching staff.

The influence of Professor Price at Columbia has been marked. His extraordinary scholarship, his strongly held opinions on all academic and educational subjects, and his sincere devotion to the highest university ideals have left a lasting impression upon his colleagues as well as upon his many students. During his long career as teacher and professor, he produced men and scholars, rather than books, and these have gone out into the colleges and schools of the country, where they serve the ideals which he taught and pay glad tribute to their master's learning and power.

Professor Price's sensitiveness and his extreme modesty prevented the world at large from knowing what we at Columbia knew so well, that he was

"The scholar who combined
The English soul and Grecian
mind."

Professor William R. Ware was appointed Professor Emeritus of Architecture, and the following minute was adopted :

On the occasion of the retirement of William R. Ware as Professor Emeritus of Architecture, the Trustees desire to place on record this expression of their appreciation of his personal worth as well as of his high professional skill and long and successful academic service. It has been given to Professor Ware to organize two successful schools of architecture, and that at Columbia University, which his hand has guided from its earliest beginnings, will remain as an enduring monument of his foresight and zealous skill. The Trustees wish for Professor Ware many years of health and happiness in the enjoyment of the dignity which he has so fully earned.

The resignation of James W. McLane, M.D., as Dean of the Medical Faculty, was received and accepted. A resolution of thanks for his long services to the College of Physicians and Surgeons was adopted.

Philip H. Hiss, Jr., M.D., was appointed Adjunct Professor in Bacteriology and assigned to a seat in the Faculty of Pure Science.

Amasa Trowbridge, Ph.B., was appointed Adjunct Professor of Mechanical Engineering, vice W. L. Cathcart, resigned, and assigned to a seat in the Faculty of Applied Science.

The following promotions and first appointments for the academic year 1903-04 were confirmed. In *Analytical Chemistry*, John B. Luther, Assistant. In *Geology*, Charles P. Berkey, Tutor. In *Mineralogy*, John Crawford, Jr., Assistant. In *Psychology*, J. Burt Miner, Assistant; James Pertice Porter, Assistant.—Under the FACULTY OF MEDICINE:—In *Pathology*, Norman E. Ditman, Instructor; Karl M. Vogel, Assistant; George

A Tuttle, Demonstrator in Pathological Anatomy. In *Clinical Pathology*, Henry Stuart Patterson, Assistant. In *Normal Histology*, A. N. Miller, Instructor; Arthur Sherwood Corwin, Assistant; Karl A. Connell, Assistant; Charles H. Smith, Assistant. In *Physiology*, Guy Cochran, Assistant Demonstrator; Leander H. Shearer, As-

sistant Demonstrator. In *Surgery*, Forbes Hawkes, Instructor in Surgery at Presbyterian Hospital; Clarence A. McWilliams, Instructor in Surgery at Presbyterian Hospital. In *Therapeutics and Clinical Medicine*, Smith E. Jelliffe, Instructor; Walter A. Bastedo, Tutor. In *Materia Medica and Pharmacology*, Frank S. Meara, Assistant.

PRIZES, FELLOWSHIPS, AND HONORS FOR 1903

COLUMBIA COLLEGE

Prize of the Alumni Association (\$50). To the most faithful and deserving student of the graduating class. Three candidates were selected by the Faculty and their names submitted to the class, viz., Clinton Gilbert Abbott, Alexander Otto Bechert, Robert Livingston Schuyler. The class chose as recipient of the prize ALEXANDER OTTO BECHERT.

Medal of the National Society of the Sons of the American Revolution. Silver medal for the best essay on the subject: "The Principles fought for in the War of the Revolution." Competition is open to Seniors in the College, and to first-year students under the other faculties. Awarded to ROBERT LIVINGSTON SCHUYLER.

Chanler Historical Prize. Annual income of \$1,000, the amount bequeathed by J. Winthrop Chanler, A.B., '47, for the best essay on "The Career of the Whig Party." Competition is open to members of the Senior Class of the College. Awarded to LEONARD MICHAEL WALLSTEIN.

George William Curtis Medals. In 1903, no awards were made of

these medals for excellence in the public delivery of English orations, but honorable mention was accorded to LEONARD MICHAEL WALLSTEIN.

Sophomore Honors. *English:* JACOB ZEITLIN; *German:* JOSEPH TOLCHINSKY; *Mathematics:* LESLIE BREWSTER SMITH.

Junior Honors. *History:* ABRAHAM MOSES DAVIS, CARLETON HUNTLEY HAYES.

Final Honors. *Romance Languages:* PIERCE PHILIP FERRIS; *English:* NATHANIEL WARING BARNES, ALBERT DAVIS; *German:* ALEXANDER OTTO BECHERT.

BARNARD COLLEGE

Kohn Mathematical Prize (\$50). MARION ELIZABETH LATHAM.

Herman Botanical Prize (\$50). MARION ELIZABETH LATHAM.

Sophomore Honors. *German:* EDITH WELLE; *Mathematics:* MARGARET CECILIA BYRNE, FRANCES HOPE PURDON; *Romance Languages:* ETHEL HENDRICKS, CARRIE KAPLAN, EDWINA LEAH LEVY, BLANCHE HORTENSE REITLINGER.

Junior Honors. *English:* HELEN ERSKINE; *German:* HILMA LEERS, IDA ETHEL LEWIS; *History:* CHARLOTTE ELIZABETH MORGAN; *Mathe-*

matics: MABEL DENTON, BETTY TRIER.

Final Honors. *English*: HELEN LOUISE COHEN, CLARA MACLELLEN HOWARD; *History*: HELEN LOUISE COHEN; *Mathematics*: MARION ELIZABETH LATHAM.

COLLEGE OF PHYSICIANS AND SURGEONS

Harsen Prizes for Proficiency at Examination. *First Prize* (\$500), ALFRED JEROME BROWN, A.B.; *Second Prize* (\$300), PETER IRVING, A.B.; *Third Prize* (\$200), ISAAC WILLIAM KINGSBURY, A.B.

Honor Men. Each of the ten Honor Men who does not obtain a higher prize, receives a Harsen Prize of \$25: ALFRED JEROME BROWN, A.B., JAMES PENDLETON ERSKINE, A.B., ISAAC WILLIAM KINGSBURY, A.B., HERMAN OTTO MOSENTHAL, A.B., FREDERICK BROWN HUMPHREYS, PH.B., ROYAL STORRS HAYNES, PH.B., HANS ZINSSER, A.B., WARD SLOSSON GREGORY, PH.B., JESSE GODFREY M. BULLOWA, A.B., PETER IRVING, A.B.

Harsen Prizes for Clinical Reports. Three annual prizes, valued respectively at \$150, \$75 and \$25; given with a bronze medal and a diploma to each prize-winner, for the best written reports by students of the College of Physicians and Surgeons of clinical instruction at the New York Hospital: *First Prize*: ALFRED JEROME BROWN, A.B.; *Second Prize*: JOSEPH GRIEF; *Third Prize*: PETER IRVING, A.B.

Cartwright Prize. A biennial prize of \$500 open to universal competition. Awarded for the best medical essay submitted upon any

subject the writer may select, and open to competition in alternate years with the Alumni Association Prize. Awarded to GEORGE W. CRILE, M.D.

Fellowships of the Alumni Association (\$500). For graduates who have shown special aptitude for scientific research in the Department of Anatomy, Physiology, or Pathology. *Fellow in Anatomy*: EDWARD ANTHONY SPITZKA, M.D.; *Fellow in Pathology*: AUGUSTUS B. WADSWORTH, M.D.; *Fellow in Pathology and Physiological Chemistry*: EDWARD RUDOLPH POSNER, M.D.

Stevens Triennial Prize (\$200). For the best medical essay upon any subject the writer may select. Divided between L. PIERCE CLARK, M.D., and THOMAS P. PROUT, M.D.

Alonzo Clark Scholarship (\$700). To promote the discovery of new facts in medical science. Awarded to CHARLES NORRIS, M.D.

SCHOOL OF ARCHITECTURE

McKim Fellowships (\$900). Open for competition every two years to graduates in Architecture under thirty years of age. Awarded to FRANCIS AUGUSTUS NELSON, B.S., and GEORGE WASHINGTON JACOBY, B.S. In addition honorable mention was accorded to EDWARD SHEPARD HEWITT, B.S.

SCHOOL OF POLITICAL SCIENCE

James Gordon Bennett Prize in Political Science (\$40). For the best essay upon some subject of contemporaneous interest on the domestic or foreign policy of the United States. Awarded to WALTER SCOTT SPIEGELBERG.

Toppan Prize (\$150). For the best written examination upon a paper prepared by the Professor in charge of the Department of Constitutional Law. Awarded to CHARLES AUSTIN BEARD.

UNIVERSITY

H. C. Bunner Medal. To the candidate for a Columbia degree who shall present the best essay on an

assigned subject in American literature. Awarded to GERARD BERNARD WERNER.

TEACHERS COLLEGE

Prize Given by the Society of Colonial Dames (\$50). Money award for the best essay on some subject related to colonial history. Awarded to CLARA FITZGERALD MANN.

STUDENT LIFE

CLASS-DAY EXERCISES

Columbia College.—The class of 1903 held its class-day exercises in the gymnasium on June 8. The class photograph, which previously has been a feature of Class-day, had been taken about a week before, so the main event of the morning was the Faculty-Senior baseball game on South Field. The contest was fiercely fought from start to finish, and both teams were fairly tired out at the end of the ninth inning, when the Seniors held the lead by the score of 28 to 12. The score was as follows:

	R. H. E.													
Seniors	5	0	4	3	1	1	4	5	5	28	19	8		
Faculty	1	0	3	0	0	2	1	2	3	12	10	12		

At 3 o'clock in the afternoon the formal exercises were held in the gymnasium, whither the senior class and their guests, the Barnard seniors, arrayed in cap and gown, filed in academic procession. By way of innovation all of the Class-day speakers were seated upon the platform. Class-President Marcellus Hartley Dodge, in a short and appropriate address, made welcome the three thousand guests who were present. Then Louis S. Odell, the

secretary, called the roll for the last time. Clinton Gilbert Abbott was the historian and he also read the class statistics. Law will be the occupation of 28 members of the class, business that of 17, 8 will do nothing, while 1 will become a minister and 1 a philanthropist, etc. Albert Davis read the class poem, after which Professor William Halllock announced the elections to Phi Beta Kappa as follows: 1902: Stanley Kidder Wilson; 1903: Stanley M. Isaacs, Clinton G. Abbott, Alexander O. Bechert, Nathaniel W. Barnes, Harold C. McCollom, Frederick L. Wells, Robert T. Schuyler, Rudolph L. von Bernuth, Leonhard F. Fuld, Leonard M. Wallstein, Charles F. Lawson, Lawrason Riggs, Jr., Walter Frank, Louis S. Odell, James G. Moses, Gerald S. O'Loughlin; 1904: Arthur S. Gutman, Carlton H. Hayes, Oscar R. Houston.

Roscoe Crosby Gaige then delivered the class prophecy and Roi Cooper Megrue came next with a very clever and amusing presentation oration. The valedictory by Gerald Stuart O'Loughlin concluded the indoor exercises. Then the class, attended by the audience, adjourned

to the east side of the Library for the planting of the yew-tree and the delivery of the yew-tree oration by Robert Bradford Bartholomew. After the singing of the class ode written by Albert Davis to the air of "America," the exercises of the day were concluded.

In the evening the graduation dance was held in the gymnasium which was filled to overflowing. Rain interfered with the illumination of the grove, but did not prevent a large attendance. Excellent music, a good floor, and a well-served supper combined to make the affair an enjoyable conclusion to a most successful and enjoyable day.

R. C. G.

Barnard Class-day was held this year as usual on the Friday preceding Commencement. The program was somewhat varied from the usual type. The well-worn history and often observed prophecy were omitted and a flag for the College and last will and testament were offered instead. Class songs of a popular order were sung throughout the exercises, while a more serious Ivy Song was substituted for the class poem.

On the stroke of three, the procession of seniors marched from Fiske Hall down the long corridor of Milbank to the little theater in Brinkerhoff. The president of the class, Clare M. Howard, gave a short address of welcome with her characteristic ease and graciousness of manner. After the roll-call by the secretary, Helen Louise King, the statistics of the class were given by May A. Johnson. Of the 50 members of the class, 15 intended

to teach and 8 to do graduate work at Yale, Harvard or Columbia; medicine, music and kindergartening each claimed one follower; 9 were to study "Domestic Economy A" at home, one was going to Europe, and the remaining 14 were going to cast in their lot with Mr. Micawber and wait for something to turn up. Regarding their ambitions, one wished to be an old maid; one frankly confessed she wished to marry, and one desired to be dean of Barnard. Harry E. Crampton and Mortimer L. Earle were announced as the most popular professors.

The presentations which followed, by Anita G. Calm, proved that this part of the program can be both clever and good-natured.

Ethel M. Pool then presented the 1903 flag to the College. She explained that the class, after much hesitation between a dormitory and pink examination books, had decided to give a flag, which was to hang in the theater and be guarded in future years by the odd-numbered classes. To prove that 1903 was not less generous with its personal qualities than with its property, Anna G. Ware then disposed of the former in the class will. It was hoped that the legacies would prove to be appropriate and profitable. Thus, the class bequeathed its popularity to 1904 and its dramatic talent to the Columbia boys for use in their 'Varsity shows. After the reading of the will, Miss Gildersleeve announced the elections to Phi Beta Kappa. Those chosen were: 1903: Helen Louise Cohen, Helen Louise King, Lucile Kolm, Elsbeth Kroeber, Marion Elizabeth Latham, Ethel Manter Pool, Kath-

erine Ellen Poole; 1904: Katherine Swift Doty.

In the valedictory, Jean Wallace Miller with a duly impressive manner, but without a trace of cant or pedantry, advised the class never to think of what might have been. At the end of its four years' course, the class could feel a fair amount of satisfaction not only in what the College had done for it, but in what it had done for the College. Miss Miller emphasized especially the broadening influence of a town college; the students, while placing a proper value on academic advantages, were forced to retain a due sense of proportion. The burden of this farewell address was not of regret for what we leave behind, but of gratitude for what we take with us.

Last of all, the class marched into the court to complete their afternoon with the Ivy Exercises. While Mrs. Liggett, bursar of the College and honorary member of 1903, planted the ivy, the class sang the Ivy Song, written by Maisie Swille Shainwald to the air of "Men of Harlech." Then followed a great deal of cheering for the dean, the faculty, Columbia, and the class of '93. And when the guests went home and thought the celebration was all over, the class held their last undergraduate supper in the college lunch-room, with Mrs. Liggett at the post of honor.

A. G. W.

STUDENT ACTIVITIES

Practically all of the undergraduate organizations enter upon the season of 1903-4 with excellent records from the college year past and

bright prospects for the one to come. **King's Crown**, during the first year of its reorganization as a representative college society, had many new problems to meet. Not the least of these was to find suitable means of entertainment for the increased attendance at the meetings. Several excellent speakers were secured and at all regular meetings refreshments were served. Professor Harry Thurston Peck, as faculty vice-president, did much to further the success of the society. L. G. McAneny, 1904, has been elected president of the Crown for the coming year, and Professor Jackson will serve as faculty vice-president.

Spectator begins its second year of life as a daily this fall. During the year past the paper has succeeded in living up to its ideals, and has, in general, been satisfactory as a medium for news. The difficulties of getting out a daily paper at Columbia are, however, very great, and it was only by the hardest kind of work that the venture was made sufficiently successful to justify its continuance. As an organ reflecting student life and sentiment the paper has attained increased importance since the change to the daily form was made. The men in charge of *Spectator* for next year year are Donald C. Brace, 1904, editor-in-chief, and Warwick S. Carpenter, 1904, business manager.

The **Literary Monthly**, after having completed one of the most successful years of its history, will be in charge of W. P. S. Earle, 1904, for the coming season. P. B. Mackie, also of the senior class, will be editor-in-chief of **Morning-side**, and Harold S. Osborne will

return to College and assume control of the **Jester**. The junior class in the College and the third year class in Applied Science elected the members of their **Columbian** board last March and some work has already been done. The editor-in-chief is R. H. Bradley and the business manager is N. W. Van Nostrand; both are from the College.

In **debating**, Columbia won the only intercollegiate debate in which she was represented last year, that with Cornell on April 3. The debate was held in New York, on the question of the advisability of the popular vote as a method for the election of United States senators. The annual inter-society debate, on May 1, resulted in a victory for **Barnard**. Although there was but one intercollegiate contest during the season, there were several society debates with teams from other colleges. On January 14 Barnard defeated the Philotechnian Society of Williams College and on February 23 Philolexian lost its debate with Hamilton College, at Clinton, N. Y. Philolexian a week later won from the Twenty-third Street Branch of the Y. M. C. A. in a debate held in Association Hall. The two lower classes held a debate in Earl Hall on April 24, which the Sophomores won. The debating union has extensive plans for the coming year. There will be a debate with the University of Michigan in Ann Arbor in December, with arrangements for a return contest in New York in March, 1905. The annual Columbia-Cornell debate will be held at Ithaca in March, 1904. Arrangements are being made for the permanent formation of a

triangular debating league between Columbia, Cornell and Pennsylvania, to go into effect during 1904-5. The societies will continue their policy of holding debates with societies from other colleges. The president of the debating Union is Warwick S. Carpenter, 1904. Mr. Ringwalt will again act as coach.

The **Chess Team** had a very successful season, winning the intercollegiate championship in December from the teams of Harvard, Yale and Princeton. Yale and Princeton were defeated in dual matches. Sewall and Keeler represented Columbia in the cable match with Oxford and Cambridge. G. W. Tucker, Jr., 1905, is the newly elected president of the club.

The **'Varsity Show**, "The Mischief Maker," was presented with great success at the Carnegie Lyceum during the week of March 23, under the management of King's Crown. All the debts of the former shows were paid and a fund of \$200 has been set aside as a guarantee for next year. The show cleared over \$900, due largely to the excellent management of Roi C. Megrue. The **Glee** and **Mandolin Clubs** gave the usual number of entertainments. Two successful concerts were held in Earl Hall. The **Sophomore Show** was a very clever presentation of "A Glimpse of Paradise," given at the Carnegie Lyceum just before the Christmas holidays.

The **Société Française** was reorganized and its membership increased. The meetings were uniformly successful, and for the first time in the history of the society a play was presented by its members alone. "L'Anglais tel qu'on le

parle," by Tristan Bernhard, was given in the Barnard College theater on April 22 with an excellent cast. O. R. Houston, 1904, is president of the society for the coming year.

The **Deutscher Verein** has continued its record of prosperity. Several interesting lectures were delivered at its meetings, and the good fellowship characteristic of the society was maintained. At the last meeting of the year Professor W. H. Carpenter was reëlected president and P. B. Mackie, 1904, was made executive chairman.

The **Chemical Society** held several successful meetings at which well-known speakers were present.

The last meeting, held at the home of Professor Chandler on June 5, took the form of a reception to Health Commissioner Lederle.

The **Engineering Society** held its usual series of lectures.

A **Literary Club** was organized late in the year by several students interested in the literary life of the university. The object of the society is the production and criticism of literature. Stories, poems and essays contributed by the members will be read and criticised and the works of other authors studied. W. F. J. Pill is president of this society.

D. C. B.

ATHLETICS

After several years of discouraging conditions and results, Columbia **baseball** in 1903 received an impetus which should ensure its increasing success for many seasons. The past season was one of many innovations, nearly all of which were more than justified by results achieved. It was seen early in the year that an unusual opportunity was afforded for the turning out of a nine which should in part redeem many past defeats. Of the 1902 nine seven players and three substitutes were still in the university, while Gearin, the star pitcher of 1901, was able to play again after a year's rest. When the call for candidates was given, sixty-seven men reported for 'Varsity and Freshman teams. This large number was due in great measure to the untiring efforts of Captain O'Neill, who made an active canvass of the University for players. Among the new men out were

Frambach, captain for 1904, who developed into the best catcher Columbia has had in years, and Joyce, third baseman, whose work on the Holy Cross nine in 1901 entitled him to that position on the All-American nine of that year. The infield with Goodman at shortstop, Taber at second base, and Bloomfield at first was one of the fastest fielding combinations among the eastern colleges.

The schedule was the longest a Columbia nine has ever had. It included at the outset thirty-two games, of which six were prevented by rain. For the first time games were played on South Field, and of these all six resulted in creditable victories. As an experiment, three long trips were taken after college closed, and it was owing to these that the percentage of games won was so greatly reduced. Many unforeseen circumstances prevented several regular players from taking

these trips, and, as a result, Columbia with a substitute team was beaten by many smaller colleges, which her regular nine would easily have overwhelmed. As it was, the team finished the season with a record of thirteen victories and thirteen defeats, the best record for over ten years. For the first time a second team was organized and this aggregation won three games, losing its remaining four each by a single run.

The 'Varsity season started auspiciously. The first three games were played on South Field and resulted in victories: St. Francis Xavier College was defeated 24 to 3, Brooklyn Polytechnic Institute by 14 to 1, and Murray Hill, the strongest semi-professional nine in New York, by 6 to 1. Rain prevented the next two games scheduled and retarded the development of the nine, so that it was defeated by Fordham 8 to 2. The next game was with Ilion, champions of the New York State professional league, who were beaten on South Field by a score of 3 to 1. The next day Columbia defeated Williams, 12 to 3, on Jasper Oval, and three days following disposed of Ilion again, 4 to 3. The game with Yale at New Haven resulted disastrously, as Yale piled up eleven runs in the last four innings, winning by 13 runs to 3. The team braced up, however, and won a good game from Lehigh at South Bethlehem by a score of 7 to 4; this victory was followed by the overwhelming defeat of Dickinson, 18 to 4. The annual up-state trip brought a defeat at the hands of Syracuse by a score of 4 to 2 in a superb game,

and an easy win over Union by 28 runs to 7. Columbia was now in good form for the game with Pennsylvania at the Polo Grounds. The contest was one of the most brilliant college games ever seen in New York, but Columbia was beaten 2 to 1. In the game with the strong Englewood Field Club, Columbia with four substitutes batted out a victory in the last three innings, winning by 13 to 5. Cornell and Columbia met at American League Park in the first game these teams have ever played in New York city. The contest was even more spectacular than that with Pennsylvania. Gearin pitched in winning form and shut out Cornell, while Columbia scored twice.

From a Columbia standpoint the game at West Point was perhaps the most notable of the year. With a score of 5 to 1 in favor of the cadets at the end of the sixth inning, Columbia made a grand rally and scored ten runs, winning finally 11 to 6. It was unfortunate that after such a brilliant showing so many misfortunes should deprive the team of its players. The remainder of the games were mostly defeats which the regular nine would never have suffered. The one game which deserves special mention is that with Harvard at Cambridge. Although Columbia had three substitutes, Harvard was able to win by only 4 to 1, not being able to score a run after the second inning, owing to the superb pitching of Tyler, whose great improvement during the season augurs well for his success next year.

Perhaps the most encouraging feature of the year was the increased

interest of the undergraduates in baseball. All the home games were very well attended, and instead of being defeats and financial losses as in former years, were usually the reverse. Financially the season was moderately successful and it is believed that most of the baseball debt will be paid off, so that next year's team can start the season free from encumbrance. Prospects for next season are very bright, as only three players expect to leave college; there is also promising material in the Freshman nine, which had a fairly successful season.

Last year the **Track Team** for the first time began regular training in the fall, and the results showed it had been of benefit. The Sophomore-Freshman dual games were held in November along with the fall handicap games. The performances showed that the lower classes contained good material and would have a strong representation on the Varsity team.

The indoor season was most successful, as the track association held the best set of indoor games that has ever been held in this city. The games were held at the 22d Regiment Armory on February 28 and thirteen colleges were represented, besides all the local star athletes. The indoor work was closed by a victory over Cornell and Pennsylvania in a two-mile relay race at the Madison Square Garden on March 14.

The spring work was begun in earnest when on March 13 a mass meeting was held in Earl Hall. The attendance and enthusiasm were not exceeded at any mass meeting of the

year. The result was that the following week Trainer Jertberg had 113 men trying for places on the squad, something that has heretofore been unknown in the history of track athletics at Columbia. All training was done on the South Field track, which had been put in the best possible condition.

On April 25 Columbia came in second in the two-mile relay championship of America on Franklin Field, Philadelphia. On April 29 the university championships were held on South Field. The performances were exceptionally good and three records were broken. On May 8 Pennsylvania defeated Columbia by a score of 67 to 48. Columbia was by no means disheartened, as Pennsylvania had an exceptionally strong dual-meet team, and the score showed a vast improvement over last year's work. The following week Columbia triumphed over Princeton for the first time in nine years by the score of 58½ to 45½. The Blue and White proved very strong in the track events, winning all except the two mile. A large amount of credit for this victory is due to Trainer Jertberg's development of new men, who won many seconds and thirds. This ended a most successful season, although a few men remained in training for the I. C. A. A. A. A. games and the N. Y. A. C. games at Travers Island. At Travers Island on June 6 the relay team defeated the N. Y. A. C. combination in time within one second of the world's record—a remarkable performance, considering the condition of the track. In the other events Columbia colors showed up well.

The loss of Captain O. M. Bishop, T. B. Johnson, H. H. Weekes, and H. McClintock will be most severely felt, but with the strong nucleus from this year's team and the amount of promising material in college, it looks as though Columbia will be even better represented in the future than this year.

E. S., JR.

The average play of the **Lacrosse Team** during 1903 was a distinct improvement over several previous years. The team defeated the University of Pennsylvania and Cornell, their opponents in the Inter-University Lacrosse League series, and in form should have beaten Harvard, if the game had been played. In the Swarthmore and Stevens games the team lacked several valuable players, who were absent on account of examinations and thesis work. A peculiarity of this year's team was a certain do-or-die determination to win. Individually the team was not so skillful as some previous teams, but it had more robustness, and played with more vim and the team-play was better than has been shown by any other team for years. Almost all of the old players will return next year, so that the prospects are bright. Fall practice, and perhaps winter practice in the gymnasium, will be necessary to give the men the same skill in stick handling possessed by other college teams which practice in the fall and winter.

VARSAITY

April 11	Columbia	4	Greater N. Y. I. A. A.	0
" 22	"	5	C. C. N. Y.	2
" 25	"	2	Crescent A. C.	7
May 2	"	3	U. of P.	2*
" 6	"	1	Swarthmore	14
" 11	"	5	Cornell	1*
" 16	"	1	Stevens	5

*Inter-University Lacrosse League championship games.

FRESHMAN

April 18	Columbia	2	Columbia, 1905	5
" 20	"	11	C. C. N. Y., 1906	0
May 2	"	5	Stevens, 1906	3
" 9	"	3	Harvard, 1906	3

The **Columbia Swimming and Water-Polo Teams** have again finished a very successful season. The only thing to be regretted is, that in spite of the earnest efforts of the manager, it was possible to arrange meets with only two of the colleges, Yale and Pennsylvania. In a total of five contests with these teams, Columbia was defeated in only one event, the loss of one of the regular men on the relay team being the probable cause of the one defeat which that team suffered, in a second contest with Yale.

As was the case last year, it was found impossible to draw Harvard into a contest; and some of the western colleges which have formed swimming teams could not be met, because of the difficulty of arranging the trip. Next year Columbia will probably have a greater number of contests in this line of sport; and if so, many victories are to be expected, for the material already on hand gives promise of still stronger teams than those of former years.

In addition to the intercollegiate events, an excellent showing was made by the members of the Columbia team in the swimming races held by the Knickerbocker Aquatic Club and the New York Athletic Club. These events gave a splendid opportunity for the new men of the teams to gain experience in competition, and they were one of the principal factors in fostering interest in swimming during the past season.

The past year brought out an increased number of Freshmen, a very encouraging fact which indicates a growing prominence of the sport, and promises to strengthen the relay and water-polo teams still further.

The **Poughkeepsie Regatta** last June was as disappointing to Columbia as it could well have been. Last in the race for University eights, last in the race for University fours, and next to last in the Freshman race is the record of the 1903 crews. Cornell made a clean-sweep of the river, winning all three races. Had the weakness of the crews been apparent all season these results would have been foreseen, and the disappointment would not have been so keen. Such was not the case. In the Harlem Regatta on Memorial Day the University crew had no difficulty in winning the senior eight-oared event and Columbia was also first in the race for intermediate four-oared gigs. Mr. Hanlon had frequently said he was satisfied with the work the men were doing and predicted that Columbia would be among the leaders at the finish. That he had been too sanguine the event proved.

The story of the 'Varsity race is easily told. From the crack of the pistol Cornell had the race in hand. Beginning with 32 strokes to the minute, which they never exceeded, and at times dropping as low as 28, they took the lead almost at the start and steadily increased it throughout, winning by ten lengths in the very fast time of 18 minutes, 57 seconds, and all but lowering the record of 18 minutes, 53½ seconds made by Cornell in 1901. Columbia,

on the other hand, started with 34 strokes to the minute, and held the lead for a few hundred yards, only to be passed by Cornell. Captain Bartholomew raised the stroke to 36 and managed to hold second place until the mile mark was passed. Soon after Columbia was overhauled by Wisconsin and before the two-mile post shot by, Georgetown also had passed her. Columbia steadily weakened from now on and it became apparent that it was only a question of how badly the eight would be beaten. By the time the bridge was reached, the 3 mile mark, Syracuse had passed Columbia and in the last half mile Pennsylvania, who had seemed out of the race, caught up and forced Columbia into last place. The men had rowed themselves completely out and drifted across the line a badly beaten crew. Their time was 19 minutes, 54½ seconds.

In the University four-oared race Columbia was again outclassed and again came in last. Cornell won after a hard race with Pennsylvania. Wisconsin, rowing in a boat loaned by Columbia, was third. The winning time was 10 minutes, 34 seconds, within 2½ seconds of the record.

The freshman race was very much like the University race and was notable in that Cornell made a new record for freshman eights, beating the old record of 9 minutes, 19 seconds, held by Yale, by one second. The work of Syracuse, coached by the old professional James A. TenEyck, was a surprise. Syracuse was second. Columbia, as usual in this event, beat Pennsylvania. Columbia had the youngest crew, and one of the lightest.

The result of all three races points conclusively to some radical defect in **training and coaching** methods at Columbia. The material for good crews exists, but it is not developed. When Mr. Hanlon took charge of the crews, demoralized as they were, in the last ten days before the 1900 race, he certainly did wonders with them; and the 1901 University crew, coached by him, was one of the fastest eights that ever rowed; the 1902 crew, also coached by Mr. Hanlon, although not remarkable, was still a fast eight. But this year's crews were almost as slow as the average of those before Mr. Hanlon came to Columbia. Under him, Columbia's best crews rowed in his first whole year as coach, and since then they have been slower each year. At the other colleges which row at Poughkeepsie, and particularly at Cornell, rowing has steadily improved and faster crews have been developed each year. During the last four years college rowing has improved wonderfully. A glance at the records will show it. Up to 1900 the record for four miles was 19 minutes, 59 seconds, and many races were won in time considerably over 20 minutes. Columbia won in 1895 in 21 minutes, 25 seconds, but the conditions were of the worst. Today a 'Varsity crew that can not row, under the best conditions, in less than 19 minutes, can not be sure of even a place.

The way to produce such crews at Columbia must be found. Lack of effort would be more disgraceful than defeat. Impressed with the need of action the Graduate Directors of the Rowing Club called a

meeting of the club July 3, which was largely attended by old rowing men. It was the almost unanimous opinion that a change be made in coaching methods from the professional to the graduate system. It was pointed out that Mr. Hanlon's greatest success had come when the men he taught were veteran oarsmen, who had learned the rudiments of rowing under former graduate coaches and who had been quick to grasp his ideas, and that, in the next two years, as the number of such men diminished and the number who had learned all they knew of rowing from Mr. Hanlon increased, the results were steadily poorer. These considerations, together with the other advantages to be had from the graduate system, led to the following motion, made by Judge Robert Cornell and seconded by Mr. Van Sinderen: "That it is the sense of this meeting that we recommend to the proper authorities of the Columbia University Rowing Club, the selection of Mr. Jasper T. Goodwin, Columbia '76, as coach." The motion was unanimously carried.

Mr. Goodwin, the proposed coach, is well known to old Columbia rowing men. He was the moving spirit in Columbia rowing for many years, first as captain and stroke of the crew and later as graduate coach. He stroked the Columbia four which crossed the ocean and won the Visitors' Cup at Henley in 1876. In 1874 he rowed No. 6 in the six-oared crew which won from a large field at Saratoga. In 1875 he became captain and stroke and his crew was second in a field of nine crews at Saratoga. After the victory at Henley he became graduate

coach and continued in that position until 1883, during which period Columbia was more successful than she has ever been since. Mr. Goodwin is a lawyer by profession, but has never lost interest in rowing.

Order of Finish and Official Times of the Inter-collegiate Races at Poughkeepsie

'Varsity Race.—Four miles. Cornell first, 18m. 57s.; Georgetown second, 19m. 27s.; Wisconsin third, 19m. 29½s.; Pennsylvania fourth, 19m. 33½s.; Syracuse fifth, 19m. 37½s.; Columbia sixth, 19m. 54½s.

Freshman Race.—Two miles. Cornell first, 9m. 18s., breaking record, made by Yale in 1897, by 1½s.; Syracuse second, 9m. 22½s.; Wisconsin third, 9m. 32s.; Columbia fourth, 9m. 41s.; Pennsylvania fifth, 9m. 45s.

Four-oared Race.—Two miles.

Cornell first, 10m. 34s.; Pennsylvania second, 10m. 35½s.; Wisconsin third, 10m. 55¾s.; Columbia fourth, 11m. 14s.

Crew Statistics

'Varsity EIGHTS

University	Av. Age;	Height;	Weight.
Columbia.....	21½	5.10¾	165¾
Cornell.....	22	6.00¾	174½
Georgetown.....	19½	6.00¾	158
Pennsylvania.....	23¾	5.11½	165¾
Syracuse.....	23½	5.11	165¾
Wisconsin.....	22½	5.11¾	172¾

FRESHMAN EIGHTS

University	Av. Age;	Height;	Weight.
Columbia.....	18½	5.10	159½
Cornell.....	19½	6.00	164½
Pennsylvania.....	19¾	5.11½	162
Syracuse.....	21¼	5.11	159
Wisconsin.....	19¾	5.10¾	164½

'Varsity FOURS

University	Average	Height;	Weight.
Columbia.....		6.00	160¾
Cornell.....		5.09½	161¾
Pennsylvania.....		5.10½	162½
Wisconsin.....		5.10½	160¾

THE ALUMNI

The removal of the **Columbia University Club** to a building double the size of the present house and far more attractive and commodious, shows what success has attended the first two years of its existence. The club has literally been crowded out of its present quarters, and the governors have been fortunate in securing the house which they have now taken, 15 East 26th Street, within a few doors of Fifth Avenue and fronting on Madison Square, which is large enough to accommodate not only the present membership of the club, but also the increase which is anticipated. In moving down town, the club is reversing the usual process, but in point of situation the new house cannot be

surpassed in convenience, taking into account the large number of its members who pass near it on their way to and from business, or who have offices in the neighborhood. The size of the house and the arrangement of the rooms will make it perfectly possible to serve class dinners without in any way interfering with the regular *table d'hôte*, and this circumstance should do much to encourage the practice, already well established, of holding class dinners in the club. Rooms suitable for committee meetings are also among the advantages which it offers, and these will doubtless be much used, as the present house has proved itself invaluable to athletics and other University en-

terprises in affording a place of meeting.

The membership of the club includes the president of the University, the dean of the College, and a number of the trustees and professors, but it is made up principally of graduates of the more recent classes. This is perhaps only natural, and it is certainly much to the honor of the alumni of the last ten years that they founded the club and made it the success which it now is, but the older alumni should realize that the club is a most useful adjunct of the University, and as such deserving of their support.

On July 23, 1903, the country lost a faithful and gifted servant and the University a loyal alumnus and devoted friend in the person of **Frederick William Holls** who passed away in the prime of life at his home, 583 North Broadway, Yonkers, on that day. He was seized with an attack of heart trouble and died almost immediately.

Mr. Holls was born in Zelienople, Pa., in 1857. He graduated at Columbia College in 1878, and two years later received the degree of LL.B. at the Columbia Law School. After his admission to the bar he gathered a large German-American clientage in New York and represented the German government in important matters. He was attorney for several of the great financial and other institutions of the city. At the time of his death he was senior member of the firm of Holls, Wagner & Burghard. He rendered noteworthy services for the Legal Aid Society, and was an active member of the Charity Organization Society.

Mr. Holls became prominent as a Republican campaign orator in 1880 and filled important engagements in the campaigns of his party. He was a candidate for state senator and was a delegate at large to the Constitutional Convention of New York in 1894, and was chairman of the Committee on Education and author of the amendments prohibiting sectarian appropriation of public money, making civil service compulsory, and separating state and municipal elections. Governor Morton appointed him in 1895 a member of the commission to form a uniform charter for cities of the third class. In this connection he framed a bill providing for a Municipal Government Board. This was adopted by the commissioners on cities of the second and third class.

He was appointed secretary of the United States delegation to the Peace Conference at The Hague, and later on became the American representative on the Committee on Arbitration appointed by the conference. Of his connection with the Peace Conference at The Hague the London *Daily News* said:

Frederick Holls, secretary of the American delegation, is the author of the American mediation proposals. In one of the most forcible and lucid speeches the conference has yet heard, he argued the utility of special mediation, as illustrated by the lessons of the Hispano-American war. He said that, had Spain and America been each assisted by a mediator, peace would probably have been arranged after the battle of Manila.

The *Independent* of July 30 in an editorial pays the following tribute to Mr. Holls in connection with the establishment of The Hague Court:

If there had been no American delegation to the Peace Conference at The Hague it is almost certain that the Hague Court would not now be in existence. If Frederick W. Holls had not been a member of the American delegation, it is quite certain that his American *confrères* would not have bothered much about the "impracticable" question of universal international arbitration. In other words, if any man is to be credited with the creation of the Hague Court that man is Mr. Holls. Not only did he engineer his cause with consummate energy and diplomacy on the floor of the conference, but he even induced Germany, who all along held out against the organization of the court and was the chief obstacle to its inception, to change her mind and sign the peace treaty. Ever afterward Mr. Holls felt an especial interest in what was largely his creation, and it was he who persuaded Mr. Carnegie to give the money for the erection of the Palace of Peace at The Hague. We shall not speak of Mr. Holls as a lawyer, a philanthropist, a politician and an author. The talents he employed in these directions he freely gave to the service of his fellow men. This, however, must not be forgotten: that all the disarmament propositions of the Peace Conference failed, and as disarmament was the original and chief topic which the Czar suggested for discussion, the whole conference would have accomplished nothing had not international arbitration come to the front. Credit for the success of the conference in promoting arbitration was mainly due to Frederick W. Holls.

During the Spanish-American war he rendered important services to the United States, refuting in Germany the prevailing false impressions and counteracting the demonstrations hostile to America, especially in the German press.

Among his other public duties Mr. Holls was chairman of the New

York State Commission on Educational Unification. During the visit of Prince Henry he was one of his entertainers. Later he went to Europe, where he was cordially received by the Emperor. During The Hague Conference he also had a special audience with the Czar. Last May President Roosevelt offered Mr. Holls the post of umpire in the claims against Venezuela, but he could not find time to accept the office.

Mr. Holls was an extensive traveler, and in 1888 published a sketch of travel in the East and in Russia under the title of "Sancta Sophia and Troiza." He also published in German a "Study of Francis Lieber," and a few years ago wrote a comprehensive account of the Hague Conference. Besides, he wrote and lectured on compulsory voting and on educational topics. In 1880 he published in the *Nation* a series of letters, signed "F. W. H.," urging the formation of a publication society to promote a reform in the civil service. These letters attracted so much attention and drew so much support, that the correspondence was finally turned over by the *Nation* to the Civil Service Reform Association, which had been organized some years earlier, and of which Rev. Dr. Bellows was at this time nominally the president, but which was practically moribund. Mainly through the efforts of Mr. Godkin and two or three others, the association was reorganized; and to the impulse given by the letters of Mr. Holls may really be traced the activity which has characterized it for the past twenty-three years.

Mr. Holls was married in 1889 to Miss Caroline M. Sayles, daughter of F. C. Sayles, of Rhode Island.

UNIVERSITY BIBLIOGRAPHY

FOR THE ACADEMIC YEAR ENDING JULY 1, 1903

I. OFFICIAL PUBLICATIONS OF COLUMBIA UNIVERSITY

Annual Catalogue: describes the organization of the University and gives a full statement of courses and facilities for research offered during the current year, lists of officers and students, accounts of fellowships, scholarships and honors offered and conferred, estimates of expenses, requirements for admission and degrees, and the regulations governing the College and the various Schools of the University: issued each December. Price, 25 cents.

Annual Reports of the President and the Treasurer to the Trustees: issued each November.

Directory of Officers and Students: issued each year soon after the opening of the University: contains the names, office hours and addresses of the officers of the University and the names and addresses of the students registered up to the time of publication: revised and reprinted in the *Annual Catalogue*.

General Catalogue of the Alumni: issued sexennially: contains the names and addresses of all graduates of the University. The current edition is that of 1900. Price, \$2.00. For sale at the University Press Bookstore.

Announcements of the various Schools of the University are issued in the spring of each year and contain information concerning admission, expenses, courses of instruction to be given during the coming year and requirements for degrees. They include:

Announcement of Columbia College, for the work for men leading to the degree of Bachelor of Arts.

Announcement of the School of Law, for the work leading to the degrees of Bachelor of Laws and Master of Laws.

Announcement of the College of Physicians and Surgeons, for the work leading to the degree of Doctor of Medicine.

Announcement of the Schools of Applied Science, together with the special announcements of the courses in Mining and Metallurgy, in Chemistry, and in Civil, Electrical and Mechanical Engineering.

Announcement of the Faculties of Political Science, Philosophy and Pure Science, for all non-professional advanced work leading to the degrees of Master of Arts, Doctor of Philosophy and Master of Laws.

Announcement of Courses in the Fine Arts, including courses of instruction given in the School of Architecture, in the Department of Music, and in the Departments of Fine Arts and Music in Teachers College.

Announcement of the Summer School.

Announcement of the Summer School of Medicine.

Circular of Information as to Entrance Examinations.

Circular of General Information, with views of the University buildings.

Announcements of the several Divisions of the University are issued in the spring and contain full information concerning the work of the coming year, or years, in those divisions. These circulars are devoted to:

Biology; Classical Philology; Geology, Geography and Mineralogy; History, Economics and Public Law; Mathematical and Physical Science; Modern Languages and Literatures; Physical Education; Oriental Languages; Philosophy, Psychology and Anthropology.

Unless otherwise stated, all the publications above named are distributed without charge upon applica-

tion to the Secretary of Columbia University.

Publications of Barnard College

Announcement of Barnard College: contains full information concerning admission, expenses, courses of instruction and requirements for the degree of Bachelor of Arts.

Report of the Dean: issued yearly.

These publications are distributed without charge upon application to the Dean of Barnard College.

Publications of Teachers College

Announcement of Teachers College: issued annually; contains full information concerning the organization, equipment and work of this institution, the Department of Education of Columbia University.

Announcement of the Extension Department.

These may be obtained without charge upon application to the Secretary of Teachers College.

Report of the Dean: issued each November.

Circular of Horace Mann School: a school fully equipped with kindergarten, elementary and secondary classes, maintained by Teachers College as a school of observation and practice.

Circulars describing the work of the following departments: *Domestic Science and Art*; *Domestic Science*, describing a course in hospital economics; *Fine Arts*; *Geography*; *Kindergarten*; *Manual Arts*; *Manual Training*; and *Music*. Also a special

This circular may be obtained without charge upon application to the Superintendent of the Horace Mann School.

II. THE COLUMBIA UNIVERSITY PRESS

The Columbia University Press was organized with the approval of the Trustees of Columbia College and was incorporated June 8, 1893, for the purpose of promoting the publication of works embodying the results of original research. The press is a private corporation, related directly to Columbia University by the provisions that its Trustees must always be officers of the University and that the President of the University shall be the President of the Press.

During the year ending July 1, 1903, the Press, through The Mac-

millan Co., of New York and London, its publishing agents, issued "China and the Chinese," by H. A. Giles, and an "Introduction to Philosophy," by W. T. Marvin, as well as current numbers of the following:* *Studies in Classical Philology*; *Studies in Comparative Literature*; *Studies in History, Economics and Public Law*; *Contributions to Philosophy, Psychology and Education*; *Studies in Romance Philology and Literature*; COLUMBIA UNIVERSITY QUARTERLY, and *Teachers College Record*.

III. SERIAL STUDIES AND CONTRIBUTIONS FROM THE UNIVERSITY†

Biological Series.—Founded in 1892; devoted to the general prob-

lems of biology; managing editors, H. F. Osborn and E. B. Wilson;

*For previous issues from the Press see *The University Catalogue* for 1899-1900, pages 398-9; 1900-1901, pages 455-456; 1901-1902, pages 439-441; 1902-1903, pages 445-449; the full catalogue issued by the Macmillan Co., and the advertising pages of the QUARTERLY. For list of current numbers of the various series see the succeeding pages of this number.

†For purposes of record and information, the QUARTERLY aims to publish in the September number of each year a complete list of the numbers issued in each of these series during the preceding academic year. If no list appears under a given heading, it may be assumed that no numbers were issued.

published for the Columbia University Press by The Macmillan Co., New York; issued irregularly, about one volume a year; price per volume (from 300 to 400 pages), \$2.00 to \$3.50.

Botanical Club, Memoirs of the Torrey.—Founded in 1889; editor, L. M. Underwood; published by the Club from Columbia University; issued irregularly, about one volume a year; \$3.00 per volume; prices of parts on application.

Vol. VIII, No. 3. The life history of *Vittaria lineata*. By ELIZABETH G. BRITTON and ALEXANDRINA TAYLOR.—Vol. IX. A monograph of the *Erysiphaceae*. By ERNEST S. SALMON.—Vol. X. Pre-Clusian botany in its relation to *Aster*. By EDWARD S. BURGESS.—Vol. XI, No. 1. The North American *Sordariaceae*. By DAVID GRIFFITHS.—Vol. XI, No. 2. The *Ulothricaceae* and *Chaetophoraceae* of the United States. By TRACEY E. HAZEN.—Vol. XII, No. 1. Flora of New Providence and Andros (Bahama Islands). By ALICE R. NORTHROP.

Botany, Contributions from the Department of.—Founded in 1886; devoted to short papers, in part reprints from other periodicals; editor, L. M. Underwood; published by the editor from Columbia University; issued irregularly, but usually one volume per year; price, per volume (about 330 pages, 30 plates), \$5.00.

No 193. Cytological changes accompanying the secretion of diastase. By JOHN C. TORREY (1902).—No. 194. A historical review of the proposed genera of the *Hydnaceae*. By HOWARD J. BANKER (1902).—No. 195. Notes on a collection of Cuban Pteridophyta, with descriptions of four new species. By LUCIEN M. UNDERWOOD and WILLIAM R. MAXON (1902).—No. 196. American ferns.—IV. The genus *Gymnogramme* of the synopsis filicum. By LUCIEN M. UNDERWOOD (1902).—No. 197. A cytological basis of the Mendelian laws. By WILLIAM A. CANNON (1902).—No. 198. Two new species of *Selaginella* in the southern

flora. By LUCIEN M. UNDERWOOD (1902).—No. 199. American ferns.—V. A review of the genus *Danaea*. By LUCIEN M. UNDERWOOD (1902).—No. 200. An enumeration of the plants collected by Dr. H. H. Rusby in South America. By H. H. RUSBY (1902).—No. 201. An index to the described species of *Botrychium*. By LUCIEN M. UNDERWOOD (1903).—No. 202. Studies in plant hybrids: The spermatogenesis of hybrid cotton. By WILLIAM A. CANNON (1903).

Botany, Memoirs of the Department of.—Founded in 1895; devoted to more extended monographs; managing editor, L. M. Underwood; published by the editor, from Columbia University; issued irregularly; \$6.00 per volume; list on application.

Chemistry, Contributions from the Havemeyer Laboratories.—Founded in 1898; reprints of papers recording research by officers and students in the School of Chemistry; managing editor, C. F. Chandler; published by the editor from Columbia University, issued annually; each volume contains the publications of one year beginning July 1; price on application.

Vol. V, No. 66. On the composition of the ferrocyanides of zinc. By EDMUND H. MILLER and J. L. DANZIGER.—No. 67. On the determination of lead in ores. By IRVING C. BULL.—No. 68. On the determination of sulphur in coal. By C. W. STODDART.—No. 69. On the manganese ferrocyanides. By ALBERT ERNEST DICKIE.—No. 70. The synthesis of alkylidihydroquinazolines from anthranilic nitrile. By M. T. BOGERT and W. F. HAND.—No. 71. The determination of sulphur and phosphorus in organic materials. By H. C. SHERMAN.—No. 72. The volumetric determination of bismuth as molybdate and its separation from copper. By HERMANN S. RIEDERER.—No. 73. Experiments on the metabolism of nitrogen, sulphur and phosphorus in the human organism. By H. C. SHERMAN.—No. 74. On the composition of cows' milk. By H. C. SHERMAN.—No. 75. Normal

heptyl thiocyanate and some new alkyl esters of dithiocarbamic acid. By M. T. BOGERT.—No. 76. The synthesis of alkylthioiketodihydroquinazolines from anthranilic nitrile. By M. T. BOGERT, H. C. BRENNEMAN and W. F. HAND.—No. 77. Paraammonio aminobenzonitrile. By M. T. BOGERT and L. KOHNSTAMM.—No. 78. Nitrophthalyl chloride and its action with ammonia and aromatic amines. By VICTOR JOHN CHAMBERS.—No. 79. A new interrupter for conductivity determinations. By C. W. KANOLT.—No. 80. A rapid method for the determination of arsenic in arsenopyrite. By J. L. DANZIGER and W. H. BUCKHOUT.—No. 81. An index to the literature of thorium, 1828-1902. By CAVALIER H. JOUET.

Classical Philology, Studies in.—Founded in 1902; to contain results of original research in the classical languages and literatures; edited by H. T. PECK and E. D. PERRY; published for the Columbia University Press by The Macmillan Co., New York; issued irregularly; prices variable.

The satire of Seneca on the Apotheosis of Claudius. By ALLAN PERLEY BALL.

Comparative Literature, Studies in.—Founded in 1899; containing results of literary research or criticism by officers or students of the department of comparative literature, or those connected with them in study; editor, G. E. WOODBERRY; published for the Columbia University Press by The Macmillan Co., New York; issued at varying intervals and prices.

No. 6. Platonism in English poetry in the sixteenth and seventeenth centuries. By JOHN SMITH HARRISON.—No. 7. Irish life in Irish fiction. By HORATIO SHEAFE KRANS.—No. 8. The English heroic play. By LEWIS NATHANIEL CHASE.

Electrical Engineering, Contributions from the Department of.—Founded in 1889; devoted to papers (chiefly reprints) by officers and students; managing editor, F. B. CROCK-

ER; published by the editor, from Columbia University; issued irregularly; prices on application.

English, Studies in.—Founded in 1900; issued by authority of the Department of English; published for the Columbia University Press by The Macmillan Co.; issued at varying intervals and prices.

Geological Department, Contributions from the.—Founded in 1892; includes short contributions and longer monographs; managing editor, J. F. KEMP; published (partly original, partly reprints) by the editor, from Columbia University; issued irregularly; prices on application.

Volume X complete. No. 81. The geology of the platinum group of metals. By J. F. KEMP.—No. 82. The traverse group of Michigan. By A. W. GRABAU.—No. 83. The Hamilton group of Thedford, Ontario. By H. W. SHIMER and A. W. GRABAU.—No. 84. Glacial phenomena in the Adirondacks and Champlain Valley. By I. H. OGILVIE.—No. 85. An analcite-bearing camptonite from New Mexico. By I. H. OGILVIE.—No. 86. Igneous rocks and circulating waters as factors in ore deposition. By J. F. KEMP.—No. 87. A. The granite area of Barre, Vermont. By GEO. I. FINLAY. B. Petrographic description of the dikes of Grand Isle, Vermont. By H. W. SHIMER. C. Note on the condition of platinum in the nickel-copper ores from Sudbury. By CHAS. W. DICKSON.—No. 88. A. Some new American species of *cyclus* from the coal measures. By A. F. ROGERS. B. On some Jurassic fossils from Durango, Mexico. By D. W. JOHNSON.—No. 89. Studies of *Gastropoda*. By A. W. GRABAU.—No. 90. The geology of the Cerrillos Hills, New Mexico. By D. W. JOHNSON.

Germanic Studies.—Founded in 1899; contain results of original research in Germanic languages and literatures; editors, W. H. CARPENTER and Calvin Thomas; published for the Columbia University Press by The Macmillan Co., New York; issued irregularly; price variable.

History, Economics and Public Law, Studies in.—Founded in 1891; contain results of original research by students in the School of Political Science; managing editor, E. R. A. Seligman; published by The Macmillan Co., New York; one volume or more issued yearly; price, per volume, \$3.00 to \$4.50.

Vol. XVI, No. 3. The centralization of administration in Ohio. By SAMUEL P. ORTH.—Vol. XVII, No. 1. Centralizing tendencies in the administration of Indiana. By WILLIAM A. RAWLES.—No. 2. Principles of justice in taxation. By STEPHEN F. WESTON.—Vol. XVIII, No. 1. The administration of Iowa. By HAROLD M. BOWMAN.—No. 2. Turgot and the six edicts. By ROBERT P. SHEPHERD.

Indo-Iranian Series.—Founded in 1900; to contain works published by officers and students in the Department of Indo-Iranian Languages, or by others associated with them in study; editor, A. V. Williams Jackson; published for the Columbia University Press by The Macmillan Co., New York; issued at varying intervals and prices.

Mineralogy, Contributions from the Department of.—Founded in 1892; to contain articles and textbooks by officers and students; managing editor, A. J. Moses; published by the editor, from Columbia University; issued irregularly (often in reprint); prices on application.

Vol. X, No. 3. Notes on recent mineralogical literature. By A. J. MOSES and L. McI. LUQUER.—No. 4. Minerals observed on buried Chinese coins. By A. F. ROGERS.

Observatory, Contributions from the.—Founded in 1892; devoted to original research; managing editor, J. K. Rees; published by the editor, from Columbia University; issued irregularly; prices on application.

Oriental Studies.—Founded in 1902; record results of original research in the Oriental languages and literatures; edited by Richard J. H. Gottheil; published for the Co-

lumbia University Press by The Macmillan Co., New York; issued irregularly; prices variable.

Pathology, Studies from the Department of.—Founded in 1890; record results of research in the department; managing editor, T. M. Prudden; on sale by J. T. Dougherty, New York; issued irregularly; price, per volume (about 175 pp.), \$1.00.

Vol. VIII. Eighteen reprints of studies published by officers of the Department of Pathology. 1902.

Philosophy, Psychology and Education, Contributions to.—Founded in 1894; original studies by officers and students of this division; edited by a committee representing the departments interested; published by The Macmillan Co., New York; issued irregularly; per number, average, 75c.; per volume (about 450 pages), average, \$3.00.

Vol. IX, No. 3. The practice-curve: A study in the formation of habits. By JOSEPH HERSHEY BAIR.—No. 4. Rhythms: motor, visual, and applied. By JAMES BURT MINER.—Vol. XI, No. 1. School administration in municipal government. By FRANK ROLLINS.—No. 2. Heredity, correlation, and sex differences in school abilities. By EDWARD L. THORNDIKE.—Nos. 3-4. College admission requirements during the nineteenth century. By EDWIN C. BROOME.—Vol. XII, Nos. 1-4. The training of secondary teachers in the United States. By G. W. A. LUCKEY.—Vol. XIII, No. 1. The perception of number. By JAMES FRANKLIN MESSENGER.—No. 2. A study of memory for connected trains of thought. By ERNEST NORTON HENDERSON.

Romance Philology and Literature, Studies in.—Founded in 1900; edited by Adolphe Cohn and H. A. Todd; published for the Columbia University Press by The Macmillan Co., New York; issued irregularly at varying prices.

No. 4. The indebtedness of Chaucer's Troilus and Criseyde to Guido delle Colonne's Historia Trojana. By GEORGE L. HAMILTON.

SERIES ANNOUNCED

Physiological Chemistry, Studies from the Department of.—Founded in 1899; to contain reprints of papers published by officers and other investigators in the Department. Edited by William J. Gies. First volume, 600–700 pp., in preparation. Future volumes to be issued irregularly.

Physiology, Studies from the Department of.—Founded in 1900; to contain reprints of articles published by officers and students of the Department; edited by J. G. Curtis and F. S. Lee. (Three volumes in preparation.)

IV. JOURNALS

ISSUED UNDER THE EDITORIAL DIRECTION OF OFFICERS OF COLUMBIA UNIVERSITY

Bookman.—Founded in 1895; devoted to the criticism of American and foreign literature in all its forms; containing articles, book reviews, correspondence, and editorial comment upon current events; edited by Harry Thurston Peck; New York, Dodd, Mead & Co.; monthly (136 pp.), 20c.; per year, \$2.00.

Bulletin of the Torrey Botanical Club.—Founded in 1870; devoted to scientific botany in its widest sense; editor, J. H. Barnhart; published by the editor from the New York Botanical Garden; monthly, 30c.; per year (about 650 pp. with 40 plates), \$3.00.

Columbia University Quarterly.—Continuing, since 1898, the *Bulletin*, founded in 1890; publishes articles on the history, the current activities and the policy of Columbia, for the information of officers, alumni and friends of the University; edited by a committee (managing editor, for 1903, Munroe Smith); published by the Columbia University Press; quarterly (about 112 pages), 30c.; per year, \$1.00.

Educational Review.—Founded in 1890; devoted to the study of education in all its forms; containing articles, discussions, book reviews, foreign correspondence and editorial review of current events; edited by Nicholas Murray Butler; New York, Educational Review Publishing Co.; monthly, except July and August (108 pp.); per year, \$3.00; foreign, \$3.50.

Journal of Comparative Literature.—Founded in 1903; devoted to the interests of the study of comparative literature in this country and in Europe; its contributors are scholars of all lands and contributions are printed in the tongues in which they are written; edited by G. E. Woodberry, J. E. Spingarn, and J. B. Fletcher (Harvard); McClure, Philips & Co.; quarterly; per year, \$3.00.

Journal of Geography.—Devoted to the interests of teachers of geography in elementary, secondary, and normal schools; edited by Richard E. Dodge in coöperation with Edward M. Lehnerts (Winona, Minn.); published for the editors by Rand, McNally & Co., Chicago; monthly, except July and August, (48 pp.), 20c.; per year, \$1.50.

Journal of Nervous and Mental Disease.—Founded in 1872; devoted to the study of diseases of the nervous system; managing editor, S. E. Jelliffe; advisory board of editors includes M. A. Starr and F. Peterson; New York, Alliance Press Co.; monthly (64 pp.), 25c.; per year, \$3.00.

Medical News.—Founded in 1843; a weekly journal devoted to advances in medicine and surgery; editor, S. E. Jelliffe; New York, Lea Brothers & Co.; weekly (48 pp.), 10c.; \$4.00 per year.

Political Science Quarterly.—Founded in 1886; devoted to the study of politics, economics and

public law; publishes annually about 25 leading articles, especially on questions of current interest, and about 130 reviews, and gives a condensed general record of political events; edited by the Faculty of Political Science (managing editor, W. A. Dunning); Boston and New York, Ginn & Co.; quarterly (about 190 pp.), 75c.; per year, \$3.00.

Popular Science Monthly.—Founded in 1872; devoted to the diffusion of science; edited by J. McK. Cattell; New York, The Science Press; monthly (96 pages), 30c.; per year, \$3.00.

School of Mines Quarterly.—Founded in 1879; official organ of the Alumni Association of the Schools of Science of Columbia University; devoted to the publication of original papers on engineering, metallurgy,

chemistry, architecture, mineralogy and geology; managing editor, R. E. Mayer; published by the editors; per year, \$2.00.

Teachers College Record.—Founded in 1899; devoted to the presentation of the theory and practice of education as advocated by the Teachers College of Columbia University; edited by J. E. Russell; New York, published for the Columbia University Press by The Macmillan Co.; bi-monthly, except July, (about 64 pp.) 30c.; per year, \$1.00.

Torrey.—Founded in 1901; a monthly journal of botanical notes and news; devoted to shorter articles than appear in the *Bulletin*, together with book reviews; editor, Marshall A. Howe; published by the Club; monthly, 15c.; per year, \$1.00.

(2) ISSUED WITH THE EDITORIAL COÖPERATION OF OFFICERS OF COLUMBIA UNIVERSITY

Americana Germanica.—Founded in 1897; devoted to the comparative study of the literary, linguistic and other cultural relations of Germany and America; contains original researches, critical articles and reviews; contributing editors include W. H. Carpenter and Calvin Thomas. New York, The Macmillan Co.; quarterly (about 112 pp.), 75c.; per year, \$2.00.

American Anthropologist.—Founded in 1888; contains original contributions and reviews on anthropology; edited by a board, including Franz Boas; New York, The Science Press; quarterly, \$1.25; per year (about 800 pp.), \$4.00.

American Historical Review.—Founded in 1896; in order to promote the interests of historical study in the United States, it publishes reviews of important works, results of original research, documents for the use of investigators and news of the work of European scholars; six editors, including W. M. Sloane; The Macmillan Co.; quarterly; per year, \$3.00.

American Journal of Anatomy.—Founded in 1901; edited by a board including G. S. Huntington; published in Baltimore; quarterly; per year, \$5.00.

American Journal of Archæology.—Founded in 1885; official journal of the Archæological Institute of America, publishing papers of the Institute and of the Schools at Athens, in Rome and in Palestine, and annual reports of these bodies, and issuing special bulletins; honorary editors include J. R. Wheeler; business manager is C. H. Young; New York, The Macmillan Co.; quarterly, \$1.50; per year, \$5.00.

American Journal of Medical Sciences.—Founded in 1820; S. E. Jelliffe, editorial supervision of department of Therapeutics, with R. W. Wilcox; Philadelphia, Lea Brothers & Co.; monthly (192 pp.); per year, \$5.00.

American Journal of Physiology.—Founded in 1898; edited for the American Physiological Society; contains original contributions on purely

physiological subjects; seven editors, including F. S. Lee; Boston, Ginn & Co.; monthly; per volume (about 500 pp.), \$5.00.

Biological Bulletin.—Founded in 1899; contains short original contributions; seven editors, including E. B. Wilson.

Bulletin of the American Mathematical Society.—Founded in 1891; a historical and critical review of mathematical science, containing also lists of new publications, notes on current events in the mathematical world, and many short original articles; editors, F. N. Cole, D. E. Smith and others; New York, The Macmillan Co.; monthly, except July and August; per year (about 500 pp.), \$5.00.

Journal of the American Chemical Society.—Founded in 1878; official journal of the American Chemical Society; devoted to the publication of articles upon recent chemical investigations and similar topics. The board of reviewers of American chemical research includes M. T. Bogert. Published by the Chemical Publishing Co., Easton, Pa.; monthly, 50c.; per year (about 2,000 pp.), \$6.00.

Journal of Comparative Neurology.—Founded in 1891; devoted to the comparative study of the nervous system; includes original compositions, reviews and notices; associate editors include O. S. Strong, with collaboration of F. S. Lee and others; published at Granville, Ohio; quarterly; per year, \$3.50.

Journal of Experimental Medicine.—Founded in 1896; devoted to the interests of scientific medicine; associate editors include T. M. Prudden; New York, D. Appleton & Co.; per volume (6 parts, about 700 pp.), \$5.00.

Journal of Morphology.—Founded in 1887; contains original contributions on purely morphological subjects; seven editors, including E. B. Wilson; Boston, Ginn & Co.; quarterly; per year, \$9.00.

Modern Philology.—Founded in 1903; a journal devoted to research in modern languages and literatures; advisory board includes Calvin Thomas; published by the University of Chicago Press; quarterly; per year, \$3.00.

Psychological Review.—Founded in 1894; devoted to the publication of original researches in psychology, critical articles and reviews; edited by J. McK. Cattell and J. M. Baldwin (Princeton), with the coöperation of M. Allen Starr and others; published bi-monthly, with an annual index and numerous monograph supplements; New York, The Macmillan Co.; the *Review*, 75c.; per year (about 700 pp.) \$4.00; the *Index* (about 200 pp.), \$1.00; the *Monographs* (about 500 pp.), \$4.00 a volume.

Science.—Founded in 1883; devoted to the advancement of science; edited by J. McK. Cattell, with an editorial committee, including N. L. Britton, H. F. Osborn, R. S. Woodward and others; New York, The Macmillan Co.; weekly, 15c.; per year (about 2,000 pp.), \$5.00.

Transactions of the American Mathematical Society.—Founded in 1900; a journal devoted primarily to research in pure and applied mathematics; the official organ of the Society for the publication of important papers read before it; three editors, including T. S. Fiske; New York, The Macmillan Co.; quarterly; per year (about 500 pp.), \$5.00.

V. STUDENT PUBLICATIONS AT COLUMBIA

The Barnard Bulletin.—Founded in 1901; a four-page sheet, issued weekly, containing Barnard College news; five cents a copy, one dollar and a half a year.

The Columbia Jester.—Founded in 1901; an illustrated comic paper; edited by a board of students; published twice a month during the college year; averages ten pages of

reading matter and illustrations and a cartoon cover; fifteen cents a copy, one dollar and a half per year, two dollars by mail.

The Columbia Law Review.—Founded in 1901; devoted to the publication of legal articles and book reviews by writers of recognized authority, and comment upon recent cases by the editors; conducted by a board of editors, averaging sixteen in number; monthly, November to June; seventy pages; thirty cents a copy, two dollars a year.

The Columbia Literary Monthly.—Founded in 1893; a magazine exclusively literary, devoted chiefly to stories, verse, essays, editorials and book reviews; edited by a board, consisting of college undergraduates and a Barnard representative; monthly, November to June, forty pages; fifteen cents a copy, one dollar a year, one dollar and a quarter by mail.

The Columbian.—The annual; a bound illustrated volume, containing statistics of athletics, fraternity membership, class achievements and other valuable information concerning student life in the University for the year just past; published the week before Christmas by a board of twelve editors from the junior class, six elected from Columbia College and six from the Schools of Applied Science. The fourteenth volume was published by the class of 1904, at one dollar and a half.

The Columbia Spectator.—Founded in 1877; published daily, except Sunday, during the college year; edited by a managing board of five,

assisted by a board of six editors and from twelve to twenty-five associate editors; three cents a copy, four dollars a year.

The Morningside.—Founded in 1896; an illustrated literary magazine, aiming chiefly to reflect the lighter and brighter side of Columbia life; edited by a board, averaging ten members, including a Barnard representative and an art editor; published every third week of the academic year, thirty pages; ten cents a copy, one dollar a year.

The Mortarboard.—Founded in 1897; an annual corresponding to the *Columbian*, but more literary in character, including, besides the history of the junior class, poems, stories and sketches, and other reading matter; published early in the second term by a board of about eight, elected from the junior class of Barnard College; price, one dollar.

The Senior Class-book.—A book privately printed by the senior class of Columbia College, through an editorial board, and distributed on class-day. Revived by the class of 1899 and continued by the class of 1900 as the *Naughty-Naughtian*, by the class of 1901 as the *1901 Class-Book*, by the class of 1902 as the *1902 Class-Book* and by the class of 1903 as the *1903 Class-Book*, including pictures and autobiographies of the members, letters from the faculty and the class-day speeches. The 1903 book contains two hundred and thirty-six pages, is bound in cloth and sells for six dollars.

VI. PUBLICATIONS BY OFFICERS OF THE UNIVERSITY

ARRANGED ACCORDING TO DEPARTMENTS

Administration

BUTLER, President Nicholas Murray. Editor of the *Educational Review*, vols. xxiv and xxv, 504 pp. each.—Editor (with introduction) of Chubb's *Teaching of English* (Teachers Professional Library). The Macmillan

Co. Pp. 411.—Taxation and teachers' salaries: Discussion before the National Council of Education, Minneapolis, Minn., July 7, 1902. *Proc. Nat. Educ. Assn.*, 1902, 328-329.—Some pressing problems: Address before the National Educational Association at Minneapolis, Minn., July 8,

1902. *Ibid.*, 66-75.—The coördination of education. *Churchman*, Aug. 2; lxxxvi, 135-136.—Educational progress of the year (unsigned). *Outlook*, Aug. 2; lxxi, 818-819.—The teacher: An address before the Millersville (Pa.) Normal School, May 22, 1902. *Normal Journal*, August.—Education in the United States. *Encyclopedia Britannica*, xxvii, 677-682.—Some fundamental principles of American education. *Educ. Rev.*, September; xxiv, 187-198.—Shall there be a two years' college course? (an interview). *Review of Reviews*, November; xxvi, 589-594.—Christmas letter. *Columbia Spectator*, Dec. 19.—The American college. *Educ. Rev.*, January; xxv, 11-20.—Columbia College, old and new. *Col. Lit. Monthly*, March; xi, 161-167.—Editor (with introduction) of Royce's *Outlines of psychology* (Teachers Professional Library). New York, The Macmillan Co., 1903. Pp. 392.—Annual report to the trustees for the year ending June 30, 1902, pp. 70, published by the University.

CANFIELD, J. H. A bit of secret history. *Independent*, April 16; lv, 914-915.—What are college students reading? *Outlook*, May 16; lxxiv, 162-166.—The class of sixty-eight, Williams College, after thirty-five years. (Class Report, ed. Privately printed. Pp. 58.

KEPPEL, F. P. Uniformity of university statistics of enrolment and expenditure. *Proc. Assn. Am. Univ.*, fourth ann. conf., Dec.; iv, 53-66.

NELSON, C. A. Dear wife o' mine; poem. *The Churchman*, Jan. 25; lxxxv, 113.—Faith and hope; poem. *Ibid.*, Aug. 23; lxxxvi, 224.—Evolution of the bookcase. *Ibid.*, Dec. 6; lxxxvi, 727-729.—Catalogue raisonnée: works on bookbinding, practical and historical; examples of bookbindings of the XVIth to XIXth centuries; from the collection of Samuel Putnam Avery, exhibited at Columbia University Library, 1903. Privately printed, New York. Pp. xii, 108.

Anatomy

HUNTINGTON, Prof. G. E. The anatomy of the human peritoneum and

abdominal cavity considered from the standpoint of development and comparative anatomy. Lea Bros. & Co. Pp. vii, 292, with 300 full-page plates, containing 582 figures, many in colors.—Present problems of myological research and the significance and classification of muscular variations. *Am. Jour. Anat.*, March 28; ii, 157-175, 7 colored plates.

HALE, Dr. H. E. Human anatomy (Medical epitome series). Lea Bros. & Co. Pp. liv, 350.—Broncho-pneumonia. *Ref. Handb. of the Med. Sciences*. William Wood & Company. Vol. vi.—Chronic pneumonia. *Ibid.*—Residual urine. *N. Y. Med. Journ.*, Feb. 14; lxxvii, 273-274.—Physical examination in diagnosis of fractures. *Internat. Journ. Surg.* April; xvi, 101-102.—Review of Dickson's First aid in accidents. *The Intercollegian*, Nov. 1; xxv, 48.

Anthropology

BOAS, Prof. F. Rudolf Virchow. *N. Y. Staatszeitung*, Sept. 14.—Rudolf Virchow's anthropological work. *Science*, Sept. 19; N. S., xvi, 441-445.—Tsimshian texts. *Bull.* 27, Bureau Am. Ethnology, Washington, Government Printing Office. Pp. 244.—The bureau of American ethnology. *Science*, Nov. 21; N. S., xvi, 828-831.—The mind of primitive man. *Annual Report Smithsonian Institution*, 1901, 451-460 (reprinted from *Journ. Am. Folk-Lore*).—The ethnological significance of esoteric doctrines. *Science*, Nov. 28; N. S., xvi, 872-874.—Kwakiutl texts, by Franz Boas and George Hunt. *Memoirs Am. Mus. Nat. Hist.*, v, 271-402.—How can endowments be used most effectively for scientific research. *Science*, April 10; N. S., xvii, 574-577.—A plea for a great Oriental school. *Journ. Am. Asiatic Assn.*, April; iii, 7-9.—The people of America and the people of the Far East. *Ibid.*, May; iii, 109-110.

Architecture

WARE, Prof. W. R. The American vignola. Boston, American Architect

and Building News Co. Pp. viii, 46; 18 plates.

HAMLIN, Prof. A. D. F. Italian gardens (in European and Japanese gardens). Henry T. Coates & Co. Pp. 11-62.—Recent progress in educational architecture. *The Churchman*, August; lxxxvi, 140-146.—Review of architectural art. *The Forum*, July-Sept.; xxxiv, 92-104.—L'Art nouveau, its origin and development. *The Craftsman*, December; iii, 129-143.—The President's report. COLUMBIA UNIVERSITY QUARTERLY, December; v, 1-15.—Roman country houses. *House and Garden*, January; iii, 1-11.—In Memoriam, Cyrus Hamlin. Press of J. J. Arakelian. Pp. 120.—Articles on Citadel, Decorative Art, Drawing, etc. New International Encyclopedia.

Astronomy

JACOBY, Prof. Harold. Comparison of astronomical photographic measures made with the reseau and without it. *Science*, Feb. 27; N. S., xvii, No. 426.

MITCHELL, Dr. S. Alfred. Flash spectrum. *Observatory*, No. 318, 199-200.—The discovery of new gases in the sun. *Science*; N. S., xvii, 627.—The new gases neon, argon, krypton and xenon in the chromosphere. *Astrophys. Journ.*, xvii, 224-228.

Botany

UNDERWOOD, Prof. L. M. Report of the scientific directors. *Bull. N. Y. Bot. Garden*, March; ii, 490-491.—An index to the described species of Botrychium. *Bull. Torrey Bot. Club*, January; xxx, 42-55.—Notes on a collection of Cuban Pteridophyta with descriptions of four new species (with W. R. Macon). *Ibid.*, October; xxix, 577-584.—American ferns, IV: The genus *Gymnogramme* of the synopsis filicum. *Ibid.*, November; xxix, 617-634.—American ferns, V: A review of the genus *Danaea*. *Ibid.*, December; xxix, 669-679.—The genus *Riella*, with descriptions of new species from North America and the Canary Islands (with M. A. Howe). *Ibid.*, April; xxx, 214-224, pl. 11, 12.—Two new species of

Selaginella in the southern flora. *Torrey*, November; ii, 172-173.—Notes on Southern ferns. *Ibid.*, February; iii, 17-19.—Some historic trees. *Journ. N. Y. Bot. Garden*, December; iii, 213-220.—A question in terminology. *Science*, Nov. 28; xvi, 869-870.—Some features of future fern study. *Fern Bull.*, October; x, 105-107.—The Department of Botany and its relation to the New York Botanical Garden. COLUMBIA UNIVERSITY QUARTERLY, June; v, 278-293.—Review of Campbell's A university text-book of botany. *Torrey*, July; ii, 108-111.—Review of a new index to botanical literature. *Ibid.*, December; 184-186.—Editor Bulletin Torrey Botanical Club, and Memoirs Torrey Botanical Club until January, 1903.

CURTIS, Dr. C. C. Review of Kraemer's Course in botany and pharmacognosy.—Review of MacDougal's Influence of light and darkness upon growth and development.—Observations on etiolation. *Torrey*, May; iii, 70-74.

Chemistry

BOGERT, Prof. M. T. Review of American chemical research. *Journ. Am. Chem. Soc.*, xxiv, June, 303-316; July, 354-361; December, 528-532; xxv, January, 4-7, 22-39; February, 74-78; March, 109, 123-131; April, 167-178; May, 227-229.—The synthesis of alkylketodihydroquinazolines from anthranilicnitrile (with William Flowers Hand). *Journ. Am. Chem. Soc.*, November; xxiv, 1031-1050.—Normal heptyl thiocyanate and some new alkyl esters of dithiocarbamic acid. *Ibid.*, March; xxv, 280-291.—The synthesis of alkylthioketodihydroquinazolines from anthranilicnitrile (with H. C. Breneman and W. F. Hand). *Ibid.*, April; 372-380.—Paraminobenzonitrile (with Lothar Kohnstamm). *Ibid.*, May; 478-483.

MILLER, Prof. E. H. On the composition of the ferrocyanides of zinc (with J. L. Danziger). *Journ. Am. Chem. Soc.*, September; xxiv, No. 9.—Review of the analytical chemistry of chromium, barium, borax

gold and silver. *Mineral Industry*, x, 61-68, 102-103, 365-366.—Chemistry for admission to college. *Educ. Rev.*, January; xxv, 85.—Calculations of analytical chemistry (second ed.). The Macmillan Co.—Review of Prescott and Sullivan's First book of qualitative chemistry. *School of Mines Quart.*, July; xxiii, 371.—Review of Holleman's Textbook of inorganic chemistry, translated by Cooper. *Ibid.*, July; xxiii, 372-373.—Review of Lord's Notes on metallurgical analysis. *Ibid.*; xxiv.

MORGAN, Prof. J. L. R. Review of Neuburger's Kalender für Electrochemiker. *Journal Am. Chem. Soc.*, May; xxv, 541.—Teaching of physical chemistry to beginning students. *School Science*, June; iii, 157.

WELLS, Dr. J. S. C. Progress in the cyanide process during the year 1901. *Mineral Industry*, x, 337-365.

SHERMAN, Dr. H. C. Experiments on the metabolism of nitrogen, sulphur and phosphorus in the human organism. Government Printing Office, Washington, D. C.—The determination of sulphur and phosphorus in organic materials. *Journ. Am. Chem. Soc.*, November; xxiv, 1100.—On the composition of cow's milk. *Ibid.*, February; xxv, 132.

JOUE, Dr. C. H. Index to the literature of thorium. Smithsonian Institution, Washington, D. C.

DANZIGER, J. L. A new qualitative test for cobalt. *Journ. Am. Chem. Soc.*, June (1902); xxiv, 578.—On the composition of the cyanides of zinc (with E. H. Miller). *Ibid.*, September; xxiv, 823.—A rapid method for the determination of arsenic in arsenopyrite (with W. H. Buckhout). *School of Mines Quart.*, April; xxiv, 400-404.

Comparative Literature

WOODBERRY, Prof. G. E. Life of Hawthorne. Houghton, Mifflin & Co., 1902. Pp. x, 302.—100 books famous in English. Grolier Club, 1902. Introduction, pp. 13-52.—Green's place as a dramatist, in Gayley's Selected English comedies. The Macmillan Co., 1903. Pp. 387-436.

—American literature. Supplement to Encyclopedia Britannica.—The Poe-Chivers Papers. *Century*, January and February; lxxv, 435-447, 545-558.—Chivers Papers. *Century*, January and February; lxxv, 435-447, 545-558.—William Watson. *Century*, October; lxxv, 801-803.—Broad principles of choice. *Outlook*, December; lxxii, 785-786.—Knickerbocker era in American letters. *Harper's*, January; cvi, 667-683.—Literary age of Boston. *Harper's*, February; cvi, 424-430.—Outlook of American letters. *Current Literature*, xxxiii, 513.—A poem read at the commemoration exercises held in honor of Emerson's 100th birthday. *Atlantic*, June; xci, 867-870.—Also various articles as editor-in-chief of the *Journal of Comparative Literature*. McClure, Phillips & Co., New York.

SPINGARN, Dr. J. E. Unpublished letters of an English humanist. *Journ. of Comp. Lit.*, January; i, 47-65.—Review of Vol. ii of Saintsbury's History of criticism. *Nation*, Jan. 15; lxxvi, 56-58.—Review of Croce's *Estetica come scienza dell'espressione e linguistica generale*. *Nation*, September; lxxv, 252-253.—Review of Altamira's *Psicologia del pueblo español*. *Nation*, lxxv, 113.—Review of Holbrook's Dante and the animal kingdom. *Bookman*, March; xvii, 82.—Notes in the *Nation*.—Editor of the *Journal of Comparative Literature*.

Dermatology

JACKSON, Dr. G. T. The American Dermatological Association and its work during its first quarter of a century. Presidential address. *Journ. Cutan. and Gen.-Urin. Dis.*, October; xx, 439-452.

Diseases of Children

JACOBI, Prof. A. Therapeutics of infancy and childhood. 3d ed. J. B. Lippincott & Co. Pp. 600.—Causes of epilepsy in the young. *Amer. Med.*, Dec. 13; iv, 927-932.—Peri-bronchitis and interstitial pneumonia. *Arch. of Pediatrics*, January; xx, 1-17.—History of American pediatrics

before 1800. *Janus*, vii, livr. 9, 10, 11, 12; pp. 460, 518, 590, 622.—The Baden struggle. *N. Y. Times*, Feb. 14.

HOLT, Prof. L. E. The diseases of infancy and childhood. 2d revised edition. D. Appleton & Co. Pp. 1161.—The care and feeding of children. 3d ed. D. Appleton & Co. Pp. 149.

Economics and Social Science

SELIGMAN, Prof. E. R. A. The economic interpretation of history. The Macmillan Co. Pp. ix, 166.—Economics and social progress. Publ. Am. Econ. Assn., February; 3d series, iv, 52-70.—Socialism. *Wilshire's Magazine*, March; 10-23.—The taxation of franchises. *Municipal Affairs*, December; vi, 765-773.—Review of Oncken's *Geschichte der Nationalökonomie*. *Pol. Sci. Quart.*, June; xviii, 350-352.

GIDDINGS, Prof. F. H. Review of Kelly's Government or human evolution. *Pol. Sci. Quart.*, December; xvii, 704-706.—Review of Mackay's History of the English Poor Law and other recent works on charity. *Ibid.*, March; xviii, 154-156.—Comment on What shall we be? *Century*, March; lxxv, 690-692.—The American people. *Internat. Quart.*, June; vii, 281-299.—Review of Linn's The story of the Mormons. *Pol. Sci. Quart.*, June; xviii, 328-330.

CLARK, Prof. J. B. The latest phase of the trust problem. *Nat. Mag.*, October; xvii, 63-66.—What is compulsory arbitration? *Ibid.*, December; xvii, 396-398.—Compulsory training in economics. *Independent*, Oct. 23; liv, 2503-2504.—Do we want compulsory arbitration? *Ibid.*, Nov. 13; 2681-2682.—Authoritative arbitration. *Pol. Sci. Quart.*, December; xvii, 553-567.—Is compulsory arbitration inevitable? *Public Policy*, Jan. 10; viii, 28-32.—The dynamics of the wages question. Publ. Am. Econ. Assn., February; lv, 130-142.—The world's peace is assured by economic tendencies. *West. Journ. Educ.*, April; viii, 155-157.—Argument against the single tax. *Single Tax Review*, April.—Religious ob-

ligations of our democracy. Proceedings of the New York State Conference of Religion, June; 1st series, iii.—Review of Colquhoun's *Mastery of the Pacific*. *Pol. Sci. Quart.*, September; xvii, 533-534.

SEAGER, Prof. H. R. Articles on Free trade, Protection, Labor, and Tariff. New International Encyclopedia, New York, Dodd, Mead & Co.—Review of Rowntree's *Poverty*, Mackay's public relief of the poor, Report of proceedings of the Third International Congress for the Welfare and Protection of Children, Folks's The care of destitute, neglected and delinquent children. *Pol. Sci. Quart.*, March; xviii, 156-161.

JOHNSON, Dr. A. S. Rent in modern economic theory. Publ. Am. Econ. Assn. The Macmillan Co. Pp. 130.—Review of Coleman's *Economics as a foundation for a theory of government*. *Pol. Sci. Quart.*, September; xvii, 538-540.—Review of Nicholson's *Principles of political economy*, vol. iii. *Ibid.*, September; xvii, 545-546.—Review of Cunningham's *Western civilization*, vol. ii. *Ibid.*, March; xviii, 151-152.—Review of Sombart's *Der moderne Kapitalismus*. *Ibid.*, June; xviii, 354-356.

Engineering (Mechanical)

CATHCART, Prof. W. L. Machine Design. New York, D. Van Nostrand Co. Pp. 289.

English

MATTHEWS, Prof. Brander. Aspects of fiction, and other ventures in criticism. 3d ed. enlarged. Chas. Scribner's Sons. Pp. 297.—Introductions to poems of Milton, Pope, Tennyson, Matthew Arnold and Lowell. American Home Library Co.—Mark Twain. Encyclopedia Britannica, supplement, iii.—Essential Americanism. *Outlook*, Dec. 6; lxxii, 772-774.—The Spanish drama. *Internat. Quart.*, December; vi, 241.—The drama in the eighteenth century. *Sewanee Review*, January; ix, 1.—The King's English and the President's. *Booklover's Mag.*, February.—The future of the drama. *Monthly Rev.*, February; *Bookman*, March; xvii, 31.—The unacted drama. *The Lamp*,

March; xxvi, 99.—The French drama. *Internat. Quart.*, March; vii, 14.—The poetic drama and the drama in prose. *Col. Lit. Monthly*, March; xi, 167.—The makers of the drama of to-day. *Atlantic*, April; xci, 504.—Briticisms of all sorts. *Harper's*, April; cvi, 709.—Phonetic fads. *Booklover's Mag.*, April.—The strangest feat of modern magic. *Scribner's*, May; xxxiii, 551.—Columbia College thirty-five years ago. COLUMBIA UNIVERSITY QUARTERLY, June; v, 260.—The mediæval drama. *Modern Philology*, June; i, 71-94.

CARPENTER, Prof. G. R. The teaching of English in elementary and secondary schools (with F. T. Baker and F. N. Scott). Longmans, Green & Co. Pp. viii, 380.

TRENT, Prof. W. P. A history of American literature, 1607-1865. D. Appleton & Co. Pp. x, 609. (Literatures of the World Series.)—A history of the United States (with Charles Kendall Adams). Boston, Allyn and Bacon. Pp. xxiv, 590.—Sir Walter Besant. *Forum*, July; xxxiv, 150.—A new book on Matthew Arnold (Paul's). *Ibid.*, October; xxxiv, 310.—Lee's Life of Queen Victoria. *Ibid.*, April; xxxiv, 547.—Girard's *Essai sur Taine*. *Am. Hist. Rev.*, July; vii, 796.—Ralph Waldo Emerson. *Bookman*, June; xvii, 421.—Burns as a lyric poet. *Booklover's Mag.*, March.—Thomas R. Price. COLUMBIA UNIVERSITY QUARTERLY, June; v, 302.—Alphonse Daudet (Introduction to "Mr. Nabob" in "A Century of French romance"). London, Heinemann.—Article on Sidney Lanier. *Encyclopedia Britannica* (new ed.).

BREWSTER, Prof. W. T. Masterpieces of American literature. *Literature, Art, and Music*, October and November.—Articles on Bryant, Emerson, Holmes, Irving, Longfellow, Lowell, and others. *New International Encyclopedia*.

HAMILTON, C. M. Sir Thomas Browne. *Sewanee Review*, January; ix, 64.

Geology

GRABAU, Prof. A. W. Studies of Gastropoda, I. *Am. Nat.*, December;

xxvi, 917-945.—Stratigraphy of Becraft Mountain, Columbia Co., N. Y. *Ann. Rep. State Palæontologist* (New York), 1902.—Palæozoic coral reefs, with notes on the classification of limestones. *Bull. Geol. Soc. of Am.*, vol. xiv.

SHIMER, Dr. H. W. Petrographic description of the dikes of Grand Isle, Vermont. *Ann. Rep. Vermont State Geologist*, 174-184.—Columbia University geological summer school. *Am. Geol.*, July; xxx, 69-71. Columbia University geological excursions. *Ibid.*, January; xxxi, 62-64.

Germanic Languages and Literatures

CARPENTER, Prof. W. H. Review of Axel Kock's *Die alt- und neuschwedische Accentuierung*. *Mod. Lang. Notes*, December; xvii, 511-517.—Articles on Flemish Language, Icelandic Language, Norwegian Literature. *New International Encyclopedia*.

TOMBO, Dr. R., Jr. English-American Goethe bibliography, 1902. *Goethe Jahrbuch*, xxiv, 319-323.—Translation: The sweat-shop and its remedies. By Eugen Schwiedland. *Internat. Quart.*, June, vii, 408-430.—University registration statistics. *Science*, Dec. 26; N. S., xvi, 1021-1023. Reprinted in *The Leader*, April; i, 280-282; *Cornell Alumni News*, v, no. 14; *University Record of the Univ. of Chicago*, vii, 272-274; *Michigan Alumnus*, ix, 208-210; *Wisconsin Alumni Magazine*, iv, 187-189; etc.—Columbia statistics. COLUMBIA UNIVERSITY QUARTERLY, iv, 398-400, 453-455; v, 121, 131, 132, 252.—Secretary, COLUMBIA UNIVERSITY QUARTERLY.

REMY, Dr. A. F. J. Report of the meeting of the Modern Language Association at Baltimore, December, 1902. *Pädag. Monatshefte*, February; —Klopstock's Bedeutung als vaterländischer Dichter. *Verhandl. des Deutschen Gesell.-Wissenschaft. Ver. eins.* March; ii-13.

Greek

YOUNG, Prof. C. H. Willard Humphreys. COLUMBIA UNIVERSITY QUARTERLY, December; v, 45-47.

HAMILTON, C. M. The Plays of Victor Hugo. *Sewanee Review*, April; xi, 169-186.

History and Political Philosophy

SLOANE, Prof. W. M. The great Napoleon's son. *Youth's Companion*, October; 484-485.—Radical democracy in France, I. *Pol. Sci. Quart.*, December; xvii, 632-651; II. *Ibid.*, June; xviii, 238-255.—Review of Rose's Napoleon. *Am. Hist. Rev.*, April; viii, 565-569.

OSGOOD, Prof. H. L. The annotation of two hundred titles in Literature of American History, edited by J. N. Larned. Houghton, Mifflin & Co.—Review of Cobb's Rise of religious liberty in America. *Pol. Sci. Quart.*, December; xvii, 697-699.—Review of Snow's Administration of dependencies. *Ibid.*, March; xviii, 141-143.—Review of Richman's Rhode Island. *Am. Hist. Rev.*, April; viii, 545-546.—Review of McCrady's South Carolina in the Revolution.

DUNNING, Prof. W. A. Review of Brown's Lower South in American history. *Pol. Sci. Quart.*, December; xvii, 701-702.

ROBINSON, Prof. J. H. An introduction to the history of Western Europe. Ginn & Co., pp. x, 714.—The study of the Lutheran revolt. *Am. Hist. Rev.*, January; viii, 205-216.

SHEPHERD, W. R. Los Archivos en los Estados Unidos. *Revista de Archivos, Bibliotecas, y Museos*, June; tercera época, año vii, no. 6, 511-512.

GARNER, Dr. J. W. The German judiciary, I. *Pol. Sci. Quart.*, September; xvii, 490-514.—Record of political events. *Ibid.*, December; xvii, 720-743; June; xviii, 356-384.—Chronique de la vie politique et parlementaire à les Etats Unis. *Revue Politique et Parlementaire*, August and February.—Two hundred and fifty articles in American history and political science (edited or contributed) in the New International Encyclopedia, including contributions on the following titles: The governments of France, Great

Britain, the German Empire, Italy, Ireland, Mexico, Norway, Netherlands, Portugal, Prussia, Switzerland, Russia, Sweden, Spain, and the United States, Ku Klux Klan, Marbury and Madison, Michigan exports, Postmaster General, Post-office, Pensions question, Lobby, Mileage, Proxy, Rider, Senatorial courtesy, Monroe Doctrine, Nullification, Ordinance of 1787, Indian affairs, Lynch law, Religious liberty, Individual liberty, Mayor, Ministry, Legislature, Legislation, Municipal corporations, Intervention, Itata affair, Interpellation, Imperialism, Jayhawker, Public lands, Military commissions, Departments of Interior of Commerce and labor, of Justice, of Navy, of State, of Treasury, of War, Legal tender, Modus vivendi, Police, Parliamentary law, Patents, Representation, Truce treaties, Privateerings, Piracy, Laws of war, Suffrage, Referendum, Reconstruction, Nicaragua canal, Panama canal, Open door, Neutrality, U. S. sanitary commission, U. S. Christian commission, Marine hospital service, Senate readjusters, Popular party, Republican, Trent affair, Veto, Whig, State, States rights, President, Vice-President, Passport, Patent office, Quorum, Territories, Prize, Prize courts, Recapture, Protocol, Declaration of St. Petersburg, Retorsion, Reprisal, Treaties of parties, Pan-American congress, Representative government, Underground railroad, Right of search, Sedition, Subsidies, Monarchy, Louisiana purchase, Sealing, Social contract, Third estate.—Articles on legislation and political history of the United States and European countries, in International Year Book, 1902.—Reviews of Le Furand Pasener's Bundesstaat und Staatenbund; Wilson's History of the American people (5 vols.); Murray's Jeanne d'Arc; Lang's Gawrie mystery; McCarthy's Reign of Queen Anne (2 vols.); Parkman's Struggle for a continent; Van Tyne's The loyalists in the American Revolution; McCurdy's South Carolina in the Revolution; Fisher's True history of the Revolution; Richman's Rhode Island, its making and meaning (2 vols.); Bolton's The private soldier

in the Revolution; Merriam's American political theories.

FLEMING, W. L. The churches of Alabama during the Civil War and Reconstruction. *Gulf States Hist. Mag.*, September; i, 104-127.—Military government in Alabama, 1865-1866. *Am. Hist. Mag.*, April; viii, 163-179.—The peace movement in Alabama during the Civil War. *South Atlantic Quart.*, April; ii, 114-125.

BOTSFORD, Dr. G. W. An ancient history for beginners. The Macmillan Co. Pp. xv, 490.—The story of Rome as Greeks and Romans tell it. The Macmillan Co. Pp. x, 328.

Infectious Diseases

BERG, H. W. Pulmonary syphilis simulating pulmonary tuberculosis. *Med. Rec.*, Dec. 13; lxii, no. 24.—Poliomyelitis, anterior, acute, subacute and chronic. *Ref. Handbook Med. Sciences*, Vol. vii.

Latin

PECK, Prof. H. T. Editor of The New International Encyclopedia (with D. C. Gilman and F. M. Colby). Vols. i-ix. Dodd, Mead & Co.—An American edition of Petronius. *Bookman*, March; xvii, 86-92.

EGBERT, Prof. J. C. Review of Van Santvoord's The House of Cæsar. *Bookman*, August; xv, 564.—Review of Dean Spence's Christianity and paganism. *Evening Post*, Feb. 19.—Articles on Chronology, Dictionary, Gaul, Livy. New International Encyclopedia.—Review of Villari's The barbarian invasions of Italy. *Bookman*, June; xvi, 402-404.

MCCREA, Prof. N. G. Review of West's Latin grammar. *Educ. Rev.*, December; xxiv, 526-531.—Articles on Epic poetry, Erasmus (as a humanist) and Horace. New International Encyclopedia.

OLCOTT, G. N. Numismatic Notes. I. A hoard of Roman coins from Tarquinii. *Amer. Jour. Archæology*, vi, 404-409.

Law (Private)

KIRCHWEY, Prof. G. W. The Problem of athletic control. COLUMBIA UNIVERSITY QUARTERLY, December; v, 15-23.

BURDICK, Prof. F. M. The essentials of business law. D. Appleton & Co. Pp. xx, 285.—What is the law merchant? *Col. Law Rev.*, November; ii, 470-485.

REDFIELD, Prof. H. S. A defect in legal education. Rep. of Am. Bar Assn., 1902.—Enforcement of attorney's lien under the New York code of civil procedure in cases of settlement by client. *Col. Law Rev.*, November; ii, 449-470.

Law (Public) and Comparative Jurisprudence

BURGESS, Prof. J. W. The election of senators by popular vote. *Pol. Sci. Quart.*, December; xvii, 650-663.—Review of Soubies and Cavette's Les républiques parlementaires. *Ibid.*, September; xvii, 522-523.

SMITH, Prof. Munroe. Customary Law, I., *Pol. Sci. Quart.*, June; xviii, 256-281.—Shortening the college course: Opinions of the Faculties. COLUMBIA UNIVERSITY QUARTERLY, March; v, 133-163.—Shortening the college course: The Chicago conference. *Ibid.*, June; v, 307-312.—Review of Bryce's Studies in history and jurisprudence. *Pol. Sci. Quart.*, September; xvii, 519-522.—Review of Greenidge's Legal procedure of Cicero's time. *Ibid.*, December; xvii, 699-701.—Review of Pollock and Maitland's History of English law (second ed.). *Ibid.*, December; xvii, 718-719.

GOODNOW, Prof. F. J. Review of Reinsch's Colonial government. *Pol. Sci. Quart.*, September; xvii, 523-526.—Review of Jenkyn's British rule and jurisprudence beyond the seas. *Ibid.*, September; xvii, 523-526.—Review of Chailley-Bert's Dix années de politique coloniale. *Ibid.*, September; xvii, 523-526.—Review of Judson's Treatise on the power of taxation. *Ibid.*, March; xviii, 153-154.—Review of Ostrogorski's Democracy and the organization of political parties. *Ibid.*, June; xviii, 532-534.

MOORE, Prof. J. B. The United States as a world-power. The Cambridge Modern History. The Macmillan Co. Vol. vii, ch. xxi, 655-686.—

Review of Adams's Lee at Appomattox and other papers. *Pol. Sci. Quart.*, December; xvii, 694-696.

Materia Medica and Therapeutics

CURTIS, Prof. E. "Was at the Lincoln autopsy." *N. Y. Sun*, April 12.

DAYTON, H. Articles on Materia Medica. *New International Encyclopedia*.

Mathematics

COLE, Prof. F. N. Secretary's reports of the meetings of the American Mathematical Society. *Bull. Am. Math. Soc.*, ix, 183-187, 281-295, 393-401. *Science*, xvi, 511-512, 791-792; xvii, 112-114, 468, 822-823.—Editor of *Bull. Am. Math. Soc.*, vol. ix.

FISKE, Prof. T. S. Second annual report of the secretary of the College Entrance Examination Board. *Educ. Rev.*, October; xxv, 271-308.—Editor of *Trans. Am. Math. Soc.*, vol. iv.

KEYSER, Prof. C. J. Mathematical productivity in the U. S. *Educ. Rev.*, November; xxv, 346-357.—Concerning the axiom of infinity and mathematical induction. *Bull. Am. Math. Soc.*, May; ix, 426-434.—Review of Mellor's Higher mathematics for students of chemistry and physics. *Educ. Rev.*, April; xxv, 429-430.

Metallurgy

HOWE, Prof. H. M. Metallurgical laboratory notes. Boston Testing Laboratories, Boston, Mass. 1902.—Eutectic and benmutic. *Eng. and Min. Journ.*, Jan. 24; lxxv, 144.—Progress in the metallurgy of iron and steel. *Cassier's Mag.*, October; xxii, 661-669.—Sir William Roberts Austin. *Metallographist*. January; vi, 1-3.—On constitution of cast iron. *Proc. Am. Soc. for Testing Materials*, ii.—Articles on Iron and Steel in the Supplement to the *Encyclopedia Britannica*.

STOUGHTON, Bradley. The development of the Bessemer process for small charges. *Trans. Am. Inst. Min. Eng.*, May; xxxii.

HOFMAN, Dr. H. O. Recent improvements in lead smelting. *Min-*

eral Industry, x.—Aluminium as a reducing and heat-producing agent. *Technology Quart.*, xv, 93.—Review of James's Cyanide process. *Ibid.*, 232.—Articles on Lead and Silver in the Supplement to the *Encyclopedia Britannica*.—Notes on the metallurgy of the copper of Montana. *Trans. Am. Inst. Mining Eng.*, vol. xxxii.

Mining

PEELE, Prof. R. Mine haulage with compressed air locomotives. *Mines and Minerals*, July; xxii, 562-564.—Hoisting from great depths. *Eng. and Min. Journ.*, April 4; lxxv, 516-518.

Neurology

STARR, Prof. M. A. The acoustic tract. *Journ. Nerv. and Men. Dis.*, June (1902); xxix, 344-346.—The surgical treatment of brain tumors. *Ibid.*, June; xxx, 321-330.—Arteriosclerosis as a cause of nervous diseases. *Med. Rec.*, June.

—Organic nervous diseases. Lea Bros. & Co. Pp. xx, 810. 25 colored plates. 278 illustrations.

PETERSON, Dr. F. Nervous and mental diseases (with Dr. Church), 3d ed. W. B. Saunders & Co. Pp. 869.—American text-book of legal medicine and toxicology (with Dr. Haines). W. B. Saunders & Co. 2 vols. Pp. 1,500.—Annual reports of the New York State Commission in Lunacy. J. B. Lyon Co. 2 vols., each 1,500 pp.

ATWOOD, Dr. C. E. Do our present ways of living tend to the increase of certain forms of nervous and mental disorder? *N. Y. Med. Jour.*

JELLIFFE, Dr. S. E. Editor of *Medical News*, lxxxi and lxxxii.—Managing editor of *The Journal of Nervous and Mental Diseases*, xxx.—Revision of new medical terms in the Standard Dictionary. Funk and Wagnalls.—Medical editor of *Encyclopedia Americana*. *Scientific American*.—Revision of fourth ed. of Butler's *Materia medica and therapeutics*. W. B. Saunders & Co.—Death by electricity and lightning, in *Text-Book of Legal Medicine and Toxicology*. W. B. Saunders & Co. i, 245-264.—Idiocy, imbecility and

feeble-mindedness (with F. Peterson). *Ibid.*, 663-682.—Students' notes on pharmacognosy. *Journ. of Pharmacol.*, September, October, November, December; viii.—Influenza and the nervous system. *Phila. Med. Journ.*, Dec. 27; x, 1041-1044.—Hypnotics, analgesics, and resultant drug addictions. *Journ. Amer. Med. Assoc.*, Feb. 28; xl, 571-574.—Some notes on the opium habit and its treatment. *Amer. Journ. Med. Sciences*, May; cxxv, 786-798.—Pain. *Ref. Handb. of the Med. Sciences*. William Wood & Co. Vol. vi.

HART, Dr. T. Stuart. Injuries and diseases of the parotid gland. *Ref. Handb. of the Med. Sciences*. William Wood & Co. Vol. vi.

CLARK, Dr. L. Pierce. Paradoxical pseudo-hypertrophy following infantile cerebral hemiplegia. *Journ. Nerv. and Men. Dis.*, November; xxix, 641-656.—The nature and pathology of myoclonus-epilepsy (with Dr. T. P. Prout). *Amer. Journ. of Insanity*, October; lix, 185-223.—The problem of epilepsy: some suggestions for its solution (with Dr. T. P. Prout). *Med. Rec.*, Feb. 14; lxiii, 252-254.—Daily rhythm in epilepsy and its interpretation. *Med. News*, June.—The critical changes in epileptic brain, their sequence and significance (with Dr. T. P. Prout). *Boston Med. and Surg. Journ.*, May.—A plea for a neurological hospital in New York. *Med. News*, Jan. 31; lxxxii, 195-196.—The movements of superior intercostal muscles in hemiplegics, a new symptom. *Amer. Journ. Med. Sciences*, June.—Notes on the newest psychopathic hospital at Kiel, with plans and illustrations. *Amer. Journ. of Insanity*, June.

Obstetrics

VOORHEES, Dr. J. D. Craniotomy. *Amer. Journ. of Obstetrics*, December; xlvi, 765-777.—Premature infants. *Ref. Handb. of the Med. Sciences*. William Wood & Co. Vol. vii, 747.

Ophthalmology

CLAIBORNE, Dr. J. H. The treatment of trachoma, with a demonstra-

tion of the instruments extant for operative treatment. *Med. Rec.*—The causes, prevention and management of myopia. *Journ. Am. Med. Assn.*

TYSON, Dr. H. H. Reports of the meetings of the Ophthalmological Section of the N. Y. Acad. of Med. *Archives of Ophthalmology*, July; xxxi, 402-404: January; xxxii, 54-62: March; xxxii, 172-181: May; xxxii, 279-292.

HOLDEN, Dr. W. A. A case of metastatic carcinoma of one optic nerve, with peculiar degenerations of both nerves. Clinical and pathological report. *Archives of Ophthalmology*, September; xxxi, 427-432.—The ophthalmology of the ancient Greeks. *Proc. of the Charaka Club*. Wm. Wood & Co. Vol. i, 91-97.

Oriental Languages—Chinese

HIRTH, Prof. F. American opportunities in China. *World's Work*, May; vi, 3454-3457.—Review of Greebe's Geschichte der chinesischen Literatur. *Deutsche Literaturzeitung*, xxiv.

Oriental Languages—Indo-Iranian

JACKSON, Prof. A. V. W. The Thirteenth International Congress of Orientalists at Hamburg. *East and West*, Bombay, November; i, 1375-1378.—Review of Mill's Gathas of Zarathushtra (Zoroaster) in meter and rhythm (New York, 1900). *Am. Journ. of Theology*, October; 768-769.—Football in Shakespeare's Day. *Columbia Library Monthly*, xi, 179-189.—Notes from India. Second series. *Journ. Am. Or. Soc.*, xxiii, 307-317.—Bibliographie 'Iranisch.' *Indogermanische Forschungen* (Anzeiger), April; xiii, 162-174.—Also many articles in the New International Encyclopedia.

Oriental Languages—Semitic

PRINCE, Prof. J. D. Kuloskap the Master (American Indian folk-lore), in collaboration with the late Charles Godfrey Leland. Funk and Wagnalls, 1902.—The modern pronunciation of Coptic in the mass. *Journ. Am.*

Oriental Soc., xxiii.—Two Assyro-Babylonian parallels to Daniel, v, 5. *Journ. Biblical Lit.*, 1903, 32-40.—The Bêlit inscription, K. 257. *Journ. Am. Oriental Soc.*, xxiv.—The first and second persons in Sumerian. *Am. Journ. Semetic Lang.*, xix, 203-227.—The modern Pequots and their language (in collaboration with Frank G. Speck). *Am. Anthropologist*, v, no. 2, 193-212.—Strathcona's horse (British patriotic song). Boston, Oliver Ditson & Co., 1903.—Review of Fossey's *La magie assyrienne*. *Am. Journ. Sem. Lang.*, xix, 184-187.—Review of Hilprecht's Recent excavations in Bible lands. *Orientalische Litteraturzeitung*, May; vi, 219-223.

YOHANNAN, Dr. A. Gul ü Naurüz, a Persian romance. *Journ. Am. Oriental Soc.*, xxiii, 102-108.—Takhsa Daslutha. A translation of the Episcopal Prayer Book into modern Syriac for the use of the Syrians in America. New York, St. Bartholomew's Press, 1903.

Orthopædic Surgery

WHITMAN, Dr. Royal. A new method of treatment for fracture of the neck of the femur, together with remarks on coxa vara. *Annals of Surgery*, November.—Treatment of congenital dislocation of the hip. *Med. News*, Nov. 8.—A report of final results in two cases of polyarthritis in children of the type first described by Still, together with remarks on rheumatoid arthritis. *Med. Record*, April 18.—A new method of correcting flexion deformity at the knee-joint. *Am. Journ. Med. Sci.*, May.

Otology

BUCK, Prof. A. H. Editor of the revised edition of *A Reference Handbook of the Medical Sciences*. William Wood & Co. Vol. v. Vols vi and vii in press.

LEWIS, Dr. R., Jr. Mastoid operations. Ref. Handb. of the Med. Sciences. Wm. Wood & Co. Vol. v, 701-713.—Complications of chronic suppuration of the middle ear. *Med. News*, Jan. 17; lxxxii, 112-115.

Pathology

PRUDEN, Prof. T. M. A résumé

of some recent researches relating to cytolysis and immunity. *Med. Rec.*, Feb. 14; lxiii, 241-252.

HISS, Dr. P. H. A study of a bacillus resembling the bacillus of Shiga, from a case of fatal diarrhoea in a child; with remarks on the recognition of dysentery, typhoid, and allied bacilli (with Dr. F. F. Russell). *Med. News*, Feb. 14; lxxxii, 289-295.—Review of Sedgwick and Winslow's (I) Experiments on the effect of freezing and other low temperatures upon the viability of the bacillus of typhoid fever, with considerations regarding ice as a vehicle of infectious disease, and (II) Statistical studies on the seasonal prevalence of typhoid fever in various countries and its relation to seasonal temperature. *Science*, April 24; xvii, 661-665.

WOOD, Dr. F. C. The prognostic value of the diazo-reaction in pulmonary tuberculosis. *Med. News*, April 14; lxxxii, 631-633.—Rickets. Ref. Handb. of the Med. Sciences, vol. vi.—New and simple stain for malarial parasites. *Med. News*, May. Several short reports of cases, published in the *Proc. N. Y. Pathol. Soc.*

NORRIS, Dr. C. A review of the precipitins, with original investigations on the bacterial precipitins.

Philosophy and Psychology

WOODBIDGE, Prof. F. J. E. What is personality? Papers, Addresses, and Discussions of the Twenty-first Church Congress in the United States. New York, Thomas Whittaker.—The philosophy of Hobbes in extracts and notes collated from his writings. Minneapolis, The H. W. Wilson Co. Pp. xxxvi, 379.

STRONG, Prof. C. A. Why the mind has a body. The Macmillan Co., 1903. Pp. x, 355.

CATTELL, Prof. J. McK. The time of perception as a measure of differences in intensity: Festschrift Wilhelm Wundt zum siebenzigsten Geburtstage überreicht von seinen Schülern. *Philosophische Studien*, xix, 63-68.—The Carnegie Institution. *Science*, Sept. 19; xvi, 460-469.—The academy of sciences; President's address before the New York Academy of Sciences. *Ibid.*, Dec. 19; xvi, 965-

974.—A biographical index of the men of science of the United States. *Ibid.*, Nov. 7; xvi, 746-747.—Homo Scientificus Americanus. President's address before the American Society of Naturalists. *Ibid.*, xvii, 561-570.—A statistical study of eminent men. *Pop. Sci. Monthly*, lxii, 359-377.—Various articles on psychology and scientific methods in the Dictionary of Philosophy and Psychology. Macmillan, 1902.—Editor of *The Psychological Review* (with Professor Baldwin of Princeton), vol. ix, pp. vi, 648; *The Psychological Index*, vol. ix, pp. viii, 178; *Monograph Supplements*, vol. xvii, pp. 654; vol. xviii, pp. 91; vol. xix, pp. 70; vol. xx, pp. 78.—Editor of *Science*, N. S., vol. xvi, pp. viii, 1140; vol. xvii, pp. xviii.—Editor of *The Popular Science Monthly*, vol. lxi, pp. iv, 576; vol. lxii, pp. iv, 576.

JONES, Dr. A. L. Induction and deduction in the teaching process. *N. Y. Teachers Monographs*, December; iv, 100-102.—Review of Witmer's Analytical psychology. *Educ. Rev.*, October; xxiv, 314-316.—Review of Aikin's *The principles of logic*. *Ibid.*, June; xxvi, 105-107.

SHELDON, Dr. W. H. The concept of the negative. *Philos. Rev.*, September; xi, 485-496.—Review of J. N. Larned's *Primer of ethics*. *Educ. Rev.*, April; xxv, 430, 431.

DAVIS, W. H. Review of Baldwin's Dictionary of philosophy and psychology. *Educ. Rev.*, December; xxiv, 440-455.—Review of River's Reports of the Cambridge anthropological expedition to Torres Straits, etc. *Psychol. Rev.*, January; x, 80-90.—A preliminary report in tests of scientific men. Abstract in *Science*, May.

Physics

HALLOCK, Prof. William. Use of boiling point in altitude determinations. *Science*, April 17; N. S., xvii.—Articles on Lightning arrester, Lissajou's figures, Magnetometer, Microscope, Micrometer, Phonetics, Polarised light and Soap-bubbles. *New International Encyclopedia*.

PARKER, Prof. H. C. Experiments concerning very brief electrical con-

tacts. *Phys. Rev.*, April; xvi, 243; *Science*, Jan. 30; xvii, 173.

TROWBRIDGE, C. C. Magnetization of iron at liquid air temperatures. *Bull. Am. Phys. Soc.*, ii, 70; *Elec. World and Eng.*, Aug. 30; *School of Mines Quarterly*, November; xxiii, 72.—The relation of wind to bird migration. *Am. Nat.*, September; xxxvi, 735.

PEGRAM, G. B. Physics in 1902. International Year Book. Dodd, Mead & Co.—Secondary radio-activity in the electrolysis of thorium solutions.

DAVIS, Dr. Bergen. Electrical conductivity and absorption of energy in the electrodeless discharge. *Am. Journ. Sci.*, March; *Physikal. Zeitsch.*, Feb. 15; xv, 202-206.

Physiological Chemistry

GIES, Prof. W. J. Experiments to determine the possible admixture or combination of fat or fatty acid with various proteid products (with Dr. E. R. Posner). *Amer. Journ. Physiol.*, July; vii, 331-339.—On the composition and chemical properties of ossealbumoid, with a comparative study of the albumoid of cartilage (with Dr. P. B. Hawk). *Ibid.*, July; vii, 340-358.—A case of pancreatic fistula of three years' duration, with a chemical study of the fluid eliminated (with Prof. F. W. Murray, Cornell University). *Amer. Med.*, July; iv, 133-138.—On the quantitative determination of acidalbumin in digestive mixtures (with Dr. P. B. Hawk). *Amer. Jour. Physiol.*, September; vii, 460-491.—On the nutritive value and some of the economic uses of the cocoanut. *Journ. N. Y. Botan. Garden*, September; iii, 169-171.—Notes on the "protagon" of the brain (with Dr. W. W. Lesem). *Amer. Journ. Physiol.*, December; viii, 183-196.—Weitere Untersuchungen über die entgiftenden Ionenwirkungen und die Rolle der Wertigkeit der Kationen bei diesen Vorgängen (with Prof. J. Loeb, University of Chicago). *Archiv. für die ges. Physiol.*, December; xciii, 246-268.—Some notes on Pollacci's new method of detecting albumin in the

urine (with G. Lindsay). *Amer. Med.*, Jan. 31; v, 175-176.—Further mucoid studies. *Proc. Amer. Physiol. Soc.*, Washington, December. *Amer. Journ. Physiol.*, February; viii, p. xiii. —Further studies of the toxic and antitoxic effects of ions (with Prof. J. Loeb, University of Chicago. *Ibid.*, pp. xiv-xv.—A proteid reaction involving the use of chromate. *Ibid.*, pp. xv-xvi.—The influence of the H ion in peptic proteolysis. *Ibid.*, p. xxiv.—Chemical studies of the pitcher plant, *Sarracenia purpurea*. *Journ. N. Y. Botan. Garden*, February; iv, 37-39.—“Alkaverdin,” a hitherto unknown pigment found in leaves of *Sarracenia purpurea*. *Proc. Botan. Soc. of America*, December, 1902. *Science*, February 27; xvii, 338.—The digestive action ensuing in the pitchers of *Sarracenia purpurea*. *Ibid.*—Chemical studies of various kinds of logwoods (with B. C. Gruenberg). *Ibid.*—The physiological action of heavy metals in mixed solutions (with Dr. R. H. True, U. S. Dept. of Agriculture). *Ibid.*—Studies on the influence of artificial respiration upon strychnine spasms and respiratory movements (with Dr. S. J. Meltzer). *Amer. Journ. Physiol.*, March; ix, 1-25. (Also in *Proc. Amer. Physiol. Soc.*, xxxi.)—An improved cage for metabolism experiments. *Proc. Soc. Exp. Biol. and Med.* *Science*, March 20; xvii, 469; *Amer. Med.*, May 2; v, 708.—Properties of “Bence Jones’ body.” *Ibid.*—On the presence of arsenic in organisms. Letter to the President of the Medico-Legal Society, New York, February 17. *Medico-Legal Journal*, March; xx, 541.—On the irritability of the brain during anæmia. *Amer. Journ. Physiol.*, May; ix, 131-137.—Proceedings of the Society for Experimental Biology and Medicine. Secretary’s reports. *Science*, March 20; xvii, 468-469; May 8; xvii, 741-743; *Amer. Med.*, May 2; v, 707-709.

RICHARDS, Dr. A. N. An experimental study of the sugar content and extravascular coagulation of the blood after administration of adrenalin (with C. H. Vosburgh). *Amer. Journ. Physiol.*, March; ix, 35-51.

—A modified Eck fistula, with a note on adrenalin glycamia. *Proc. Soc. Exp. Biol. and Med.* *Amer. Med.*, May 2; v, 709; *Science*, May 8; xvii, 742-743.

HAWK, Dr. P. B. On the composition and chemical properties of osseo-albumoid, with a comparative study of the albumoid of cartilage (with W. J. Gies). *Amer. Journ. Physiol.*, July; vii, 340-358.—On the quantitative determination of acidalbumin in digestive mixtures (with W. J. Gies). *Ibid.*, September; vii, 460-491.

Physiology

LEE, Prof. F. S. The action of alcohol on muscles (with Dr. William Salant). *Amer. Journ. Physiol.*, October; viii, 61-74.—The scientific aspect of modern medicine. *Med. News*, December; lxxxi, 1153-1161. Also, *Science*, Dec. 26; xvi, 1001-1016, and *Colorado Med. Journ.*, December; viii, 523-540.—The action of ethyl alcohol on contractile protoplasm. *Proc. Amer. Physiol. Soc.*, Washington, December, 1902. *Amer. Journ. Physiol.*, February; viii, p. xix.

CUNNINGHAM, Dr. R. H. Numerous signed abstracts of articles from *Les Archives d’électricité médicale*, in *Journ. of Nerv. and Ment. Dis.*, xxix, xxx.

BURTON-OPITZ, Dr. R. The flow of the blood in the external jugular vein. *Amer. Journ. Physiol.*, September; vii, 435-459.—Muscular contractions and the venous blood-flow. *Ibid.*, May; ix, 161-185.—Changes in the blood-volume of the vein of the submaxillary gland on stimulation of the chorda tympani and sympathetic nerves. *Proc. Soc. Exper. Biol. and Med.* *Amer. Med.*, May 2; v, 707; *Science*, May 8; xvii, 741.—Does a backward flow ever occur in the veins? *Ibid.*—Venous pressure. *Amer. Journ. Physiol.*, June; ix, 198-215.—Translation of Emil Ponfick’s *Atlas der medico-chirurgischen Diagnostik*. Vols. iv and v.—Numerous reviews for the *Bio-chemische Centralblatt*.

Practice of Medicine

SWIFT, Dr. G. M. Remarks upon adherent pericardium. *Med. News*,

Feb. 28; lxxxii, 403-405.—A case of febrile purpura. *Archives of Pediatrics*, January; xx, 26-28.

SHRADY, Dr. A. M. Diseases of lungs: tuberculosis. Ref. Handb. of the Med. Sciences. William Wood & Co. Vol. v, 599-605.

Religion

VAN DEWATER, Dr. George R. Oration on Character and Destiny, before Grand Lodge of Masons in State of New York. Proc. Grand Lodge, 1902, p. 194.—Oration on Evacuation of New York by the British troops, published by Centennial Lodge, January, 1903.—Address on Immortality. Proc. Grand Lodge of Masons State of N. Y., 1903.—A revised manual of family prayers (new ed.). Brooklyn, Orphans Press of Church Charity Foundation, 1902.

Romance Languages and Literatures

COHN, Prof. Adolphe. An estimate of Emil Zola, *The Evening Post*, September 29.—The streets of Paris, *The Cosmopolitan Magazine*, December.—The school question in France, *The Ethical Record*, October, November.—Opportunities for university study in France, COLUMBIA UNIVERSITY QUARTERLY, June; v, 296-301.

LOISEAUX, L. A. Marianela, by B. Pérez Galdós, edited with preface, introduction, and notes in English. New York, W. R. Jenkins. Pp. viii, 283.

NITZE, Dr. W. A. The Old French grail romance Perlesvans: A study of its principal sources. Baltimore, Murphy. Pp. v, 115.—Review of Dickinson's King Arthur in Cornwall. *Mod. Lang. Notes*, November; xvii, 427-431.—Review of Weston's Three days' tournament. *Ibid.*, May; xviii, 184-186.—Articles on Chanson de Roland, Roman de la Rose, and Reynard the Fox. *New International Encyclopedia*.

PAGE, C. H. Songs and Sonnets of Pierre de Ronsard, selected and translated into English verse. Houghton, Mifflin & Co. Pp. xxxvi, 139.—"Fools rush in." . . . *Harper's Magazine*, July; cv, 302.—Sources. *The*

Critic, July; N. S. xli, 30.—Autumn Matins. *The Century*, October; lxiv, 842.—Love's Waiting-Time. *The Bookman*, February; xvi, 547.—To Ronsard. *The Independent*, April; lv, 1,031.

HOLBROOK, Dr. R. T. Dante and the Animal Kingdom. New York, The Macmillan Co. Pp. xx, 376.—Gaston Paris. *The Bookman*, May; xvii, 237-239.—Romanic lexicographical miscellanies. *Mod. Lang. Notes*, February; xviii, 42-45.—The understanding and the misunderstanding of Dante's animal lore. *Ibid.*, xviii, 158-159.—Meistersinger, Minnesinger, Lyric poetry, Minstrel, and other articles. *New International Encyclopedia*.

FITZ-GERALD, J. D. Columbia University. *La Lectura*, Madrid, February; año ii, 262-273.—Caballeros hinojosos del siglo XII. *Revista de Archivos, Bibliotecas, y Museos*, Madrid, February; tercera época, año vi, 49-60.—Spanish etymologies, II. *Revue hispanique*, Paris, ix, 20-34.

Surgery

HARTLEY, Prof. F. Laryngectomy for malignant disease. *N. Y. Med. Journ.*, Dec. 13; lxxvi, 1020-1025; Dec. 20; lxxvi, 1059-1062.

COLEY, Dr. W. B. The influence of the Roentgen ray upon the different varieties of sarcoma. *Trans. Am. Surg. Assn.*, xx, 308-334.—The present status of the X-ray treatment of malignant tumor. *Med. Rec.*, March 21; lxiii, 441-451.—Review of abdominal surgery. *Progressive Medicine*, Lea Bros. & Co., June.—Results of operation for the radical cure of inguinal and femoral hernia, with an analysis of one thousand cases operated upon from 1891-1902. *Annals of Surgery*, June; xxxvii, 801-824.

HOTCHKISS, Dr. L. W. Contusions of the abdomen, with injuries of the viscera. *Internat. Journ. of Surgery*, July and August.—Internal urethrotomy. *N. Y. State Journ. of Med.*, February; iii, 56-59.

BLAKE, Dr. J. A. The diagnostic value of abdominal rigidity. *N. Y. Med. Journ.*, January 3; lxxvii, 9-12.

—Some problems in the major surgery of the kidneys; with a report of cases. *Med. News*, April 11; lxxxii, 673-679.—The treatment of diffuse peritonitis. *Trans. Congress Am. Physicians and Surgeons*.

BREWER, Dr. G. E. Some practical points in the anatomy of the gall bladder region. *Med. News*, May 2; lxxxii, 821-825.—Fatal acetonæmia following an operation for acute appendicitis. *Annals of Surgery*, October; xxxvi, 481-493.—Cases illustrating some important points in the diagnosis and treatment of abdominal contusions associated with visceral injuries. *Annals of Surgery*, February; xxxvii, 197-214.—Differential diagnosis in diseases of the gall bladder and ducts. *Boston Med. and Surg. Journ.*, May 14; cxlviii, 526-533.—A text-book of surgery. Philadelphia, Lea Bros. & Co.

BICKHAM, Dr. W. S. A text-book of operative surgery. Philadelphia, W. B. Saunders & Co. Pp. 1000, with 559 illustrations.

SCHMITT, Dr. A. E. A preliminary statement of the alkalinity of the blood in infections and the infusion of salts derived from horse's blood as a therapeutic measure. *Amer. Med.*, March 1; iii, 349-351.—A contribution to the anatomy and surgery of the temporal bone. *Amer. Journ. of the Med. Sciences*, April; cxxv, 563-592.

DOWD, Dr. C. N. Tuberculosis of the femoral, inguinal and iliac lymph nodes, secondary to foot wounds. *Annals of Surgery*, May.

Zoology

OSBORN, Prof. H. F. Recent zoöpalæontology (continued). *Science*, Oct. 24; N. S., xvi, 673-676; Oct. 31; 713-715; Nov. 7; 749-752; Jan. 23; xvii, 157-158; Feb. 13; 275-276; Feb. 20; 312-314; Feb. 27; 356-357.—The New York Zoölogical Park and Aquarium. *Science*, Feb. 13; N. S., xvii, 265-267.—On the age of the Belly River series or formation in Canada. *Ottawa Naturalist*, February; xvi, no. 11.—On vertebrata of the mid-cretaceous of the North West Territory (with L. M. Lambe). *Contrib. to Canadian*

Palæontology, iii, II, 1-81, pls. i-xxi. *Geol. Surv. of Canada*. Ottawa, September, 1902.

DEAN, Prof. Bashford. The preservation of muscle-fibers in sharks of the Cleveland shale. *Am. Geologist*, xxx, 5, 273-279, pls. viii-ix.—Historical evidence as to the origin of the paired limbs of vertebrates. *Am. Naturalist*, October; xxxvi, 767-776, Fig. 1.—Biometric evidence in the problem of the paired limbs of the vertebrates. *Ibid.*, November; 837-847, Pl. I.—The Carnegie institution. *Science*, Oct. 24; N. S., xvi, 641-644.—Instruction offered in the Fishery Commission Laboratory at Bergen. *Ibid.*, 676.—Review of O. P. Hay's Bibliography and catalogue of the fossil vertebrata of North America. (To the end of the year 1900.) *Science*, Oct. 31; N. S., xvi, 701-703.—A case of mimicry out-mimicked? Concerning Kallima butterflies in museums. *Ibid.*, Nov. 21; 832-833.—The eggs of the Eastern Atlantic hag-fish, *Myxine lirosa* Gir. *Ibid.*, xvii, 433.—A preliminary account of studies on the Japanese frilled shark, *Chlamydoselachus*. *Ibid.*, 487.—Additional specimens of the Japanese shark *Mitsukurina*. *Ibid.*, 630-631.—An outline of the development of a Chimæroid. *Biological Bulletin*, April; iv, 270-286, figs. 1-19.—Obituary notice of a lung fish. *Pop. Sci. Monthly*, May; lxiii, 33-39, figs. 1-7 c.—On albinism, partial albinism and polychromism in Myxinoids. *Am. Naturalist*, xxxvii, no. 437, figs. 1-3.—Notes on the long-snouted Chimæroid of Japan, *Rhinochimæra* (Harriotta) *pacifica* (Garman) Mitsukuri. *Journ. of the Science College*, Tokio, pls. 2.—Notes on Chimæra. Two Japanese species, *C. phantasma* Jordan and Snyder, and *C. mitsukurii*, n. s., and their egg-cases. *Ibid.*, pl. 1.—Notes on Japanese myxinoids. Description of a new genus *Myxinoides*, and a new species *Homeo atami*. Reference also to their eggs. *Ibid.*, pls. 2.—Report on methods of Japanese oyster culture. *U. S. Fish Comm. Bull.*, 1902, 17-37, pls. 3-7, figs. 27.

CALKINS, Prof. Gary N. The life-cycle of *Paramœcium caudatum*.

Arch. f. Entwicklungsmechanik, xv.

—The effect of stimuli on the life-cycle of *Paramœcium caudatum* (with C. C. Leib). *Arch. f. Protistenkunde*, i.—The protozoan nucleus. *Ibid.*, ii.—The six hundred and twentieth generation of *Paramœcium caudatum*. *Biol. Bull.*, iii.—Marine protozoa from Woods Hole. *U. S. Fish Comm. Bull.*, 1901, 413-469.—Review of Lankester's A treatise on zoology; part iv: The platyhelminia, mesozoa, and nemertine. *Science*, Nov.—Review of J. Orschansky's Die Vererbung im gesunden und krankhaften Zustande und die Entstehung des Geschlechts beim Menschen. *Charities*, April 18.—Review of Patten's Heredity and social progress. *Quart. Journ. Econ.*

WILSON, Prof. E. B. The marine biological laboratory and the Carnegie Institution. *Science*, Oct. 10; xvi, no. 406, 501-592.—Mendel's Principles of heredity and the maturation of the germ-cells. *Ibid.*, Dec. 19; xvi, no. 416, 991-993.—Notes on I. The reversal asymmetry in the regeneration of alpheus heterochelis. *Biolog. Bull.*, March; iv, 4, 197-210.—II. Merogony and regeneration in renilla. *Ibid.*, April; iv, 5, 215-226.—Experiments on cleavage and localization in the nemertine-egg. *Roux's Arch. f. Ent.*, xvi, 411-461.

STRONG, Dr. O. S. The cranial nerves of *Squalus acanthias*. *Science*, Feb. 13; N. S., xvii.

Barnard College

EARLE, Prof. M. L. Ad Horatii Serm. I, 1, 15 sqq. *Mnemosyne*, N. S., xxx, 347.—Ad Vergilii Aen. I, 39 sqq. *Ibid.*, xxxi, 46.—On the first ode of Horace. *Class. Rev.*, xvi, 398-401.—Notes on Sophocles's Antigone. *Ibid.*, xvii, 5-6.—Of the prologue of the Agamemnon. *Ibid.*, 102-105.—Studies in Sophocles's Trachinians. *Trans. Am. Philol. Assn.*, xxxiii, 5-29.—Notes on Cicero, De natura deorum. *Proc. Am. Philol. Assn.*, xxxiii, pp. lxx-lxxi.—Ad Caesaris Comm. de Bello Gallico initium. *Revue de philologie*, xxvii, 52.—Sophocle, Oedipe-Roi, v, 10-11. *Revue de philologie*; xxvii, 151-153.

KNAPP, Prof. C. Notes on the Medea of Seneca. *Proc. Am. Philol. Assn.*, xxxiii, pp. viii-x.—Note on Tacitus, Agricola, 31, 5. *Ibid.*, pp. xlix-li.—Notes on Seneca's Medea. *Class. Rev.*, February; xviii, 44-47.—On Horace, Odes, iii, 30, 10-14. *Ibid.*, April; xvii, 156-158.

HIRST, G. M. The cults of Olbia. Part I. *Journ. of Hellenic Studies*, November; xxii, part 2.—Part II, June; xxiii, part 1.—Review of papers of the British School at Rome, I. *The Speaker* (London), Nov. 8.

KASNER, E. The characterization of collineations. *Bull. Amer. Math. Soc.*, July; ix, no. 10, 545-546.—The ninth summer meeting of the Am. Math. Soc. *Ibid.*, November; ix, 73-94.—Review of Czuber's Probabilités et moyennes géométriques. *Ibid.*, January; ix, 215-217.—The cogredient and digredient theories of multiple binary forms. *Trans. Am. Math. Soc.*, January; iv, 86-102.—The generalized Beltrami problem concerning geodesic representation. *Ibid.*, April; iv, 149-152.—On the point-line as element of space: a study of the corresponding bilinear connex. *Ibid.*, July; iv, no. 3, 213-233.—The group generated by central symmetric, with application to polygons. *Amer. Math. Monthly*, March; x, 57-63.—The double-six configuration connected with the cubic surface, and a related group of Cremona transformations. *Am. Journ. of Math.*, April; xxv, 107-122.—The Apollonian problem in space. *Am. Math. Monthly*, June; x, no. 6.

DAVISON, E. S. Review of Coyne's Ireland, agricultural and industrial. *Pol. Sci. Quart.*, June; xviii, 340-343.

DAY, W. S. An experiment relating to the application of Lagrange's equations of motion to electric currents. *Phys. Rev.*, September; xv, 154-162.

PARSONS, E. C. The Laws of Imitation by Gabriele Sarde. Translated by E. C. Parsons. New York, Henry Holt & Co. (In press.)

Teachers College

RUSSELL, Dean J. E. The educational value of examinations for

admission to college. *School Review*, January; xi, 42-54.—Editor of American Teachers Series. Longmans, Green & Co.: The teaching of history and civics, H. E. Bowen; The teaching of chemistry and physics, Alexander Smith and E. H. Hall; The teaching of English, G. R. Carpenter, F. T. Baker and F. N. Scott.—Editor of Teachers College Record.

BAKER, Prof. F. T. The teaching of English (with G. R. Carpenter and F. N. Scott). Longmans, Green & Co.

DODGE, Prof. R. E. Notes on geographical education. *Bull. Am. Geog. Soc.*, October; xxxiv, 346-349.—Life amid desert conditions. *Ibid.*, December; 412-422.—Review of Moore's Lessons in geography. *Journ. of Geog.*, January; ii, 61.—Review of Emerson's The New England States. *Ibid.*, March; ii, 162.—Review of Tarr's Physical geography of New York State. *Educ. Rev.*, May; xxv, 538-540.—Elementary geography. Rand.—Coeditor of *Journal of Geography*, i, 297-486; ii, 1-342.—General geography and physiography of New York City district (with B. Willis). Geological atlas of the United States, No. 83, 1-2; 17-18. U. S. Geol. Survey, Washington, D. C.—Approaching Boston. *Journ. of Geog.*, June; ii, 271-277.

McMURRY, Prof. F. M. The Speyer School. *Teach. Coll. Rec.*, November and January.

SMITH, Prof. D. E. Mathematics in the elementary school. *Teach. Coll. Rec.*, March; iv, No. 2.—The outlook for arithmetic. *School Science*, April; iii, 10.—Review of Annuaire des mathématiciens, publié sous la direction de MM. Laisant et Buhl. *Bull. Am. Math. Soc.*, January; ix, 218.—Review of Curtze's Urkunden zur Geschichte der Mathematik im Mittelalter und der Renaissance. Part 1, *Ibid.*, November; ix, 123; part 2, *Ibid.*, April; ix, 376.—Review of Abhandlungen zur Geschichte der Mathematik, xiv. *Ibid.*

MONROE, Prof. P. Articles on Seven liberal arts, Basedow, Chautauqua, Coeducation, College, American colleges, Comenius, Common

schools, Curriculum, Degree, Education, Elective studies, Froebel, Grammar schools, High schools, Gymnasias and Real Gymnasias, Infant schools, Jacotet, Kindergarten, Lancaster, Mary Lyon, Horace Mann, Monitorial system, Systems of national education, Secondary education, Religious education, Universities. New International Encyclopedia.—Articles on Education, Universities and Colleges. International Year Book, 1903.

SACHS, Prof. J. Effect of college entrance examinations on secondary schools. Proc. 16th Ann. Conv. Assn. Coll. and Prep. Schools Middle States and Maryland.

WOOLMAN, Prof. M. S. Trade schools for girls. *Churchman*, Aug. 2; 147-150.—Manhattan trade schools for girls. *Commons*, December.—Manhattan trade schools for girls. *Charities*, Jan. 3; 29-32.—Manhattan trade schools for girls. *Man. Train. Mag.*, July, 237-240.—Digest of lectures on the Manhattan Trade School for girls. Ann. Rep. of Mothers' Assembly, N. Y. State, 1903.—Reports and special circulars issued for the Manhattan Trade School for Girls.

LLOYD, Prof. F. E. Third report of a committee appointed by the Society of Plant Morphology and Physiology at Baltimore, Dec. 28, 1900, to consider the formulation of a standard college entrance option in botany (with W. F. Ganong). *School Science*, May; ii, 156-165.—Vivipary in *Podocarpus*. *Torrey*, August; ii, 113-117.—An interesting irregularity in a rose flower. *Ibid.*, June; ii, 90-91.—Mutual irregularities in opposite leaves. *Ibid.*, September; ii, 137-139.—Vacation observations. *Ibid.*, November; ii, 173-175; December; ii, 177-180; January; iii, 5-6.—Review of Mell's Biological laboratory methods, and of two new elementary botanical text-books.

THORNDIKE, Prof. E. L. Notes on child study (2d ed.). The Macmillan Co. Pp. 175.—Heredit, correlation and sex differences in school abilities. The Macmillan Co. Pp. 60.—The decrease in the size of American families. *Pop. Sci. Monthly*, May; 64-70.—The careers of scholarly

men in America. *Century*, May; lxvi, 153-155.

BIGELOW, Prof. M. A. The early development of Lepas. A study of cell-lineage and germ-layers. *Bull. Mus. Comp. Zool.*, Harvard College, July; xl, No. 2, 61-144, 12 plates.

—Review of Pratt's Invertebrate zoölogy. *Am. Nat.*, xxxvi, 502-503.

—Review of Parker and Parker's Practical zoölogy. *Science*, July; N. S., xvi, 62-63.—Review of Jordan and Heath's Animal forms. *Am. Nat.*, October; xxxvi, 821-822.—Notes on European edible snails. *School Science*, January; ii, No. 7.

—Review of French's Animal activities. *Ibid.*—Notes on recent advances in zoölogy, I. *Ibid.*, May; iii, no. 9.—Reports of secretaries of sections of biology, N. Y. Acad. of Sciences. *Science*, April, May, June.

BAHLESEN, Dr. L. New methods of teaching modern languages. *Teach. Coll. Rec.*, May.

O'GRADY, C. G. Outline for a curriculum, Kindergarten training schools. *Kindergarten Rev.*, June; *Kindergarten Mag.*, May.

HOFER, M. R. Editor of Music for the child world. Vol. i, Characteristic scenes and sketches; vol. ii, Marches, rhythms and games; vol. iii, Musical story and picture book.—

Primary and Junior songs for the Sunday School.—Singing games old and new.—Music for elementary grades. *Teach. Coll. Rec.*, January; iv, 12-19.—Kindergarten study program of games and music. *Kindergarten Mag.*, September.

PARSONS, F. A. Concerning mounting and framing. *Applied Arts Book*, April.—Definite principles in art. *South. Man. Train. Mag.*, June.

BURKS, J. D. The practical value of teaching agriculture in the public schools. *Journ. of Proc. and Addresses*, Nat. Educ. Assn., 437-438.

—History of the Speyer School. *Teach. Coll. Rec.*, November; iii, 6-12.—The environment of the Speyer School. *Ibid.*, 12-31.—The Speyer School building. *Ibid.*, January; iv, 1-9.—Practical work for graduate students of Teachers College. *Ibid.*, 80-90.—The Speyer School of Teachers College. COLUMBIA UNIVERSITY QUARTERLY, March; v, 166-173.

SALMON, L. M. Syllabus for the study of the history of civil service reform. Pp. 19.—Civil service reform principles in education. *Proc. Nat. Civil-Service Reform League*, 1902.—How should the entrance examination paper in history be constructed? *Educ. Rev.*, June; xxvi, 22-35.

UNIVERSITY STATISTICS

I. SUMMER SESSION, 1903

A—STUDENTS CLASSIFIED ACCORDING TO SEX

	General		Medical	Total	
Men	359	38.19%	53	412	41.49%
Women	581	61.81%	—	581	58.51%
	940	100.00%	53	993	100.00%

B—STUDENTS CLASSIFIED AS OLD AND NEW

	General		Medical	Total	
Previously matriculated....	326	34.68%	41	367	36.96%
New Students.....	614	65.32%	12	626	63.04%
	940	100.00%	53	993	100.00%

C—STUDENTS CLASSIFIED ACCORDING TO PREVIOUS PREPARATION

Institutions	Graduates of		Partial Courses in		Total	
Colleges.....	236	25.11%	97	10.32%	333	35.43%
Professional schools for teachers	333	35.43%	42	4.47%	375	39.90%
Other secondary or higher institutions	124	13.19%	46	4.89%	170	18.08%
	693	73.73%	185	19.68%	878	93.41%
No secondary or higher training.....	—	—	—	—	62	6.59%
					940	100.00%

Of the 53 medical students, 40 were graduates of colleges or medical schools, 2 had taken partial courses in medical schools, 5 were graduates of secondary or higher institutions, and 6 had taken partial courses in similar institutions.

D—STUDENTS CLASSIFIED ACCORDING TO TEACHING POSITIONS

Elementary schools	423	45.00%
Secondary schools	119	12.66%
Higher educational institutions.....	35	3.72%
Normal schools	45	4.79%
Superintendents	5	.53%
Special teachers	16	1.70%
Teachers in private schools.....	80	8.51%
	723	76.91%
Not engaged in teaching.....	217	23.09%
	940	100.00%

Of the medical students, 13 were physicians and 40 were students (39 at the College of Physicians and Surgeons, 1 at the University of Vermont).

E—STUDENTS CLASSIFIED ACCORDING TO RESIDENCE

North Atlantic Division:

Connecticut	17
Maine	1
Massachusetts	19
New Jersey	88
New York:	
Outside of New York City.....	103
New York City:	
Manhattan and the Bronx.....	315
Brooklyn	125
Queens	20
Richmond	12
	472
	575
Pennsylvania	50
Rhode Island	1
Vermont	2
	753
	80.11%

South Atlantic Division:

Delaware	3		
District of Columbia	5		
Florida	2		
Georgia	18		
Maryland	16		
North Carolina	5		
South Carolina	5		
Virginia	11		
West Virginia	3		
	—	68	7.24 %

South Central Division:

Alabama	5		
Arkansas	1		
Kentucky	5		
Louisiana	1		
Mississippi	3		
Oklahoma	1		
Tennessee	2		
Texas	6		
	—	24	2.55 %

North Central Division:

Illinois	9		
Indiana	2		
Iowa	8		
Kansas	4		
Michigan	8		
Minnesota	6		
Missouri	15		
Nebraska	3		
North Dakota	2		
Ohio	13		
Wisconsin	1		
	—	71	7.55 %

Western Division:

California	1		
Colorado	7		
Oregon	1		
Utah	1		
Washington	3		
	—	13	1.38 %

Insular Territory:

Puerto Rico	5		.53 %
-------------------	---	--	-------

Foreign Countries:

Canada	2		.21 %
Cuba	1		.11 %
Japan	3		.32 %

 940 100.00 %

Of the medical students, 31 came from New York (29 from New York City), 7 from New Jersey, 4 from Connecticut, 2 from Pennsylvania, and 1 each from Vermont, Massachusetts, Rhode Island, Georgia, Kentucky, Arkansas, Texas, Illinois, and Canada.

II. UNIVERSITY REGISTRATION : 1902-1903

Faculties	First Year	Second Year	Third Year	Fourth Year	Special	Graduates	Auditors	Total
Columbia College.....	157	87	128	69	54	—	—	495
Barnard College.....	92	78	74	50	64	—	—	358
Total undergraduates.....	—	—	—	—	—	—	—	853
Faculties of Political Science } Philosophy, and Pure Science }	—	—	—	—	26	568	29	623
Total non-professional } *	—	—	—	—	—	—	—	623
Faculty of Applied Science.....	227	182	152	89	47	9	16†	722
Faculty of Law.....	178	148	129	—	6	—	—	461
Faculty of Medicine.....	201	205	181	171	37	—	—	795
Teachers College ‡.....	—	—	—	—	—	—	—	633
Total professional students.....	—	—	—	—	—	—	—	2611
<i>Deduct double registration §.....</i>	—	—	—	—	—	—	—	<i>132</i>
Net total.....	—	—	—	—	—	—	—	3955
Summer Session 1902.....	—	—	—	—	—	—	—	643
Grand net total ||.....	—	—	—	—	—	—	—	4507
Teachers College extension students	—	—	—	—	—	—	—	1196

* The total 623 does not include 80 college graduates studying under the professional faculties of Law, Medicine, and Applied Science, who are also candidates for the degree of A.M. or Ph.D.

† These 16 auditors were Cornell University students to whom the privileges of the University were extended during their absence from Ithaca because of the typhoid-fever epidemic.

‡ For a statistical classification of students primarily enrolled in Teachers College, consult the report of the Dean of Teachers College.

§ The 132 are distributed as follows: 13 students in Columbia University and 38 in Barnard College are also enrolled in Teachers College as candidates for a professional diploma; 81 (56 men, 25 women) Teachers College students are enrolled in the graduate faculties as candidates for the higher degrees.

|| Excluding 91 Summer Session students of 1902 who returned for work at the University during the academic year 1902-1903.

III. UNIVERSITY REGISTRATION: 1898-1903

Faculties	1898-1899	1899-1900	1900-1901	1901-1902	1902-1903	Increase over 1901-1902
Columbia College.....	403	465	476	492	495	3
Barnard College.....	202	251	301	339	358	19
Total undergraduates.....	605	716	777	831	853	22
Faculties of Political Science, Philosophy, and Pure Science } *...	376	442	466	535	623	88
Total non-professional } graduate students }	376	442	466	535	623	88
Faculty of Applied Science.....	459	491	566	626	722	96
Faculty of Law.....	349	380	423	440	461	21
Faculty of Medicine.....	726	787	797	809	795	-14
Teachers College.....	297	391	528	634	633	-4
Total professional students.....	1831	2049	2314	2509	2611	102
<i>Deduct double registration</i> †.....	—	—	105	134	132	-2
Net total.....	2812	3207	3452	3741	3955	214
Summer Session.....	—	—	417	579	643	64
Grand net total ‡	2812	3207	3761	4234	4507	273
Teachers College extension students...	1173	751	679	900	1196	296

* Women graduate students were registered at Barnard College in 1898 and 1899, but have been included here under the graduate faculties, as they have been so registered since 1900. These figures also include auditors registered in the graduate faculties; in previous years these were accounted for separately.

† Students in Columbia University and in Barnard College also enrolled in Teachers College as candidates for a professional diploma, and Teachers College students enrolled in the graduate faculties as candidates for the higher degrees.

‡ Excluding Summer Session students who returned for work in the fall.

R. TOMBO, JR.

